



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader
308-4290, CP3/4-3D62

Voluntary Results Feedback Form

- I am an examiner in Workgroup: Example: 1713
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

BEST AVAILABLE COPY

Drop off or send completed forms to STIC/EIC1700 CP3/4 3D62





STIC Search Report

EIC 1700

STIC Database Tracking Number: 102419

TO: Preeti Kumar
Location: CP3 9B03
Art Unit : 1751
August 28, 2003

Case Serial Number: 09/838512

From: Kathleen Fuller
Location: EIC 1700
CP3/4 3D62
Phone: 308-4290

Kathleen.Fuller@uspto.gov

Search Notes

It is really not possible to do a structure search on these claims as the product of the modification of starch with the structure fragments in the claims is not structurally indexed by Chemical Abstracts. I searched for modification of starch or amylose or amylopectin and the utility. I also used the starting compounds used for modification of the starch in the application to search for references on modification of starch.

BEST AVAILABLE COPY

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Preeti Kumar Examiner #: 79016 Date: 8/26/03
 Art Unit: 1751 Phone Number 305-0178 Serial Number: 091838 512
 Mail Box and Bldg/Room Location: CP3 9B03 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: See Attached Bib Sheet
 Inventors (please provide full names): _____

Earliest Priority Filing Date: 4/20/2000

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search claims 1-5.

Thank you.

Preeti

305-0178

CP3-9B03.

BEST AVAILABLE COPY

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>R. Fuller</u>	NA Sequence (#) _____	STN <u>✓</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>1</u>	Questel/Orbit _____
Date Searcher Picked Up: <u>8/28/03</u>	Bibliographic _____	Dr. Link _____
Date Completed: <u>30</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>30</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>50</u>	Other _____	Other (specify) _____

=> FILE REG

FILE 'REGISTRY' ENTERED AT 16:51:04 ON 27 AUG 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 AUG 2003 HIGHEST RN 573649-48-6
DICTIONARY FILE UPDATES: 25 AUG 2003 HIGHEST RN 573649-48-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 16:51:14 ON 27 AUG 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Aug 2003 VOL 139 ISS 9
FILE LAST UPDATED: 26 Aug 2003 (20030826/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE

L6 10 SEA FILE=REGISTRY ABB=ON (10126-68-8/BI OR 28519-06-4/BI OR 3033-77-0/BI OR 34214-79-4/BI OR 4860-03-1/BI OR 544-10-5/BI OR 79-11-8/BI OR 9005-25-8/BI OR 9005-82-7/BI OR 9037-22-3/BI)
L7 3 SEA FILE=REGISTRY ABB=ON L6 AND (STARCH OR AMYLOSE OR AMYLPECTIN)
L8 7 SEA FILE=REGISTRY ABB=ON L6 NOT L7
L12 2 SEA FILE=REGISTRY ABB=ON L7 AND (AMYLOSE OR AMYLPECTIN)
L13 1 SEA FILE=REGISTRY ABB=ON L7 NOT L12
L14 135900 SEA FILE=HCAPLUS ABB=ON L13 OR STARCH

L16 71274 SEA FILE=HCAPLUS ABB=ON L12 OR AMYLOSE? OR AMYLOPECTIN?
 L17 4309 SEA FILE=HCAPLUS ABB=ON L16(L) (RCT OR RACT)/RL
 L19 96 SEA FILE=HCAPLUS ABB=ON L14(L) POF/RL(L) (PREP OR IMF OR
 SPN)/RL
 L20 5 SEA FILE=HCAPLUS ABB=ON L17 AND L19
 L21 2032 SEA FILE=HCAPLUS ABB=ON (L14 OR L16) AND POF/RL
 L22 110 SEA FILE=HCAPLUS ABB=ON L21 AND FABRIC?
 L23 10297 SEA FILE=HCAPLUS ABB=ON L8
 L24 161 SEA FILE=HCAPLUS ABB=ON L23(L) L14
 L25 1 SEA FILE=HCAPLUS ABB=ON L22 AND L24
 L26 8 SEA FILE=HCAPLUS ABB=ON L24 AND FABRIC?
 L27 492 SEA FILE=HCAPLUS ABB=ON L16(L) 23
 L28 2 SEA FILE=HCAPLUS ABB=ON L27 AND FABRIC?
 L29 7 SEA FILE=HCAPLUS ABB=ON L20 OR L25 OR L28
 L30 1332 SEA FILE=HCAPLUS ABB=ON L14(L) POF/RL
 L31 1169 SEA FILE=HCAPLUS ABB=ON L16 AND L30
 L32 55 SEA FILE=HCAPLUS ABB=ON L31 AND FABRIC?
 L33 2 SEA FILE=HCAPLUS ABB=ON L32 AND DETERGENT?/SC, SX
 L34 12 SEA FILE=HCAPLUS ABB=ON L31 AND DETERGENT?/SC, SX
 L35 1000 SEA FILE=HCAPLUS ABB=ON L14(L) POLYMER? (L) MODIF?
 L36 601 SEA FILE=HCAPLUS ABB=ON L35 AND L12
 L37 15 SEA FILE=HCAPLUS ABB=ON L36 AND DETERGENT?/SC, SX
 L38 6 SEA FILE=HCAPLUS ABB=ON L36 AND L23
 L39 74 SEA FILE=HCAPLUS ABB=ON L19 AND L16
 L40 1 SEA FILE=HCAPLUS ABB=ON L39 AND DETERGENT?/SC, SX
 L41 41 SEA FILE=HCAPLUS ABB=ON L20 OR L25 OR L26 OR L28 OR L29 OR
 L33 OR L34 OR L37 OR L38 OR L40

=> D L41 ALL 1-41 HITSTR



L41 ANSWER 1 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2003:414277 HCAPLUS
 DN 138:403356
 TI Soluble sachet containing effervescent base material
 IN Cowan, Alison; Horne, Graham Robert; Davies, Craig Joseph; Fullman, Jason
 Ronald
 PA PZ Cussons (International) Limited, UK
 SO Brit. UK Pat. Appl., 13 pp.
 CODEN: BAXXDU
 DT Patent
 LA English
 IC ICM C11D017-00
 ICS A61K007-50; C11D003-00
 CC 46-6 (Surface Active Agents and Detergents)
 Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2382350	A1	20030528	GB 2002-21861	20020920
PRAI	GB 2001-22665	A	20010920		

AB A sachet formed from a water sol. plastic material preferably for addn. to bath water, comprises a personal care compn., which includes at least one surfactant together with an effervescent base material, wherein the base material liberates a gas when in contact with a sufficient amt. of water. Typically, the base material comprises a carbonate and/or a bicarbonate, e.g. sodium bicarbonate in combination with an acid, such as citric acid. The base material and the surfactant(s) may be provided in powd. or

granular form. The surfactant(s) may be anionic, nonionic, cationic, amphoteric or mixts. thereof. The plastics material may be polyvinyl alc., polyvinyl pyrrolidine, a starch-based polymer, cellulose, or an alginate.

ST sodium bicarbonate citric acid effervescent material bath tablet;
polyvinyl alc sachet bath prepn
IT Bath preparations
(bubble, tablet; in a sol. sachet)
IT Detergents
(cleaning compns.; sol. sachet contg. effervescent material in bath prepn.)
IT Effervescent materials
(in sol. sachet for bath prepn.)
IT 9002-89-5 9003-43-4, Polyvinyl pyrrolidine 9004-34-6, Cellulose, uses
9005-25-8D, Starch, based-polymer 9005-32-7D, Alginic
acid, deriv.

RL: **POF (Polymer in formulation)**; TEM (Technical or engineered
material use); USES (Uses)

(sol. sachet contg. effervescent material in bath prepn.)

IT 50-21-5, Lactic acid, uses 64-18-6, Formic acid, uses 69-72-7,
Salicylic acid, uses 77-92-9, Citric acid, uses 79-14-1, Glycolic
acid, uses 87-69-4, Tartaric acid, uses 110-16-7, Maleic acid, uses
110-44-1, Sorbic acid 144-55-8, Sodium bicarbonate, uses 298-14-6,
Potassium bicarbonate 471-34-1, Calcium carbonate, uses 497-19-8,
Sodium carbonate, uses 506-87-6, Ammonium carbonate 533-96-0, Sodium
sesquicarbonate 546-93-0, Magnesium carbonate 584-08-7, Potassium
carbonate 1066-33-7, Ammonium bicarbonate 101508-09-2, Potassium
sesquicarbonate 103346-15-2

RL: TEM (Technical or engineered material use); USES (Uses)

(sol. sachet contg. effervescent material in bath prepn.)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; GB 0955896 A
- (2) Anon; WO 2002059242 A2 HCAPLUS
- (3) Anon; GB 2157705 A HCAPLUS
- (4) Anon; GB 2375515 A

IT **9005-25-8D, Starch**, based-polymer

RL: **POF (Polymer in formulation)**; TEM (Technical or engineered
material use); USES (Uses)

(sol. sachet contg. effervescent material in bath prepn.)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 2 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:319439 HCAPLUS

DN 138:323058

TI Contaminant-tolerant foaming additive containing alcohol ether sulfates
IN Munoz, Pablo; Harris, William Franklin; Acker, David Brian; Siegel, Joel
Farrell

PA Benchmark Research & Technology, Inc., USA

SO U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM C11D017-00

NCL 510407000; 510424000; 510426000; 510475000; 510506000

CC 46-4 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003078180	A1	20030424	US 2001-39591	20011024
PRAI	US 2001-39591		20011024		
OS	MARPAT 138:323058				
AB	A non-aq. foamer compn. comprises: (a) an alc. ether sulfate salt; (b) a water miscible solvent; and (c) a polymer selected from the group consisting of natural polymers, modified natural polymers, synthetic polymers, and combinations thereof. The compn. functions in a wide pH range and under conditions of salt, alc., and hydrocarbon contamination.				
ST	alc ether sulfate solvent polymer foaming compn				
IT	Alcohols, uses				
	Esters, uses				
	Glycols, uses				
	Ketones, uses				
	RL: NUU (Other use, unclassified); USES (Uses)				
	(aliph., water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)				
IT	Foaming agents				
	(contaminant-tolerant foaming additive contg. alc. ether sulfates)				
IT	Glycols, uses				
	RL: NUU (Other use, unclassified); USES (Uses)				
	(ethers, aliph., water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)				
IT	Ethers, uses				
	RL: NUU (Other use, unclassified); USES (Uses)				
	(glycol, aliph., water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)				
IT	Imines				
	RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)				
	(polyimines; contaminant-tolerant foaming additive contg. alc. ether sulfates)				
IT	Polyoxyalkylenes, uses				
	RL: NUU (Other use, unclassified); USES (Uses)				
	(water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)				
IT	Solvents				
	(water-miscible; contaminant-tolerant foaming additive contg. alc. ether sulfates)				
IT	9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-28-6, Gum ghatti				
	9000-30-0, Guar gum 9000-36-6, Gum karaya 9000-40-2, Locust bean gum				
	9000-65-1, Gum tragacanth 9000-69-5, Pectin 9002-89-5,				
	Polyvinylalcohol 9003-01-4, Poly(acrylic acid) 9004-30-2,				
	Carboxymethyl hydroxyethylcellulose 9004-62-0, Hydroxyethylcellulose				
	9005-25-8, Starch, uses 9005-32-7, Alginic acid				
	9042-14-2, Dextran sulfate 11138-66-2, Xanthan gum 24991-23-9				
	25085-79-4, Ethylene-maleic acid copolymer 25087-26-7, Poly(methacrylic acid) 25300-64-5, Maleic acid-styrene copolymer 25513-46-6,				
	Poly(L-glutamic acid) 26101-52-0, Poly(vinylsulfonic acid) 38193-45-2,				
	Butylvinylether-maleic acid copolymer 39300-88-4, Tara gum 39421-75-5,				
	Hydroxypropyl guar 39454-79-0, Carboxymethyl hydroxypropyl guar				
	41315-86-0, Ethylvinylether-maleic acid copolymer 50851-57-5,				
	Poly(styrenesulfonic acid) 96949-22-3, Welan gum 143409-53-4				
	RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)				

(contaminant-tolerant foaming additive contg. alc. ether sulfates)
 IT 512807-93-1, AES 100
 RL: TEM (Technical or engineered material use); USES (Uses)
 (contaminant-tolerant foaming additive contg. alc. ether sulfates)
 IT 56-81-5, Glycerine, uses 57-55-6, Propylene glycol, uses 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 67-63-0, Isopropanol, uses 67-64-1, Acetone, uses 68-12-2, Dimethylformamide, uses 71-23-8, Propanol, uses 71-36-3, Butanol, uses 78-83-1, Isobutanol, uses 78-93-3, Methyl ethyl ketone, uses 96-22-0, Diethyl ketone 97-99-4 98-00-0, 2-Furanmethanol 107-21-1, Ethylene glycol, uses 107-41-5, Hexylene glycol 109-86-4, Ethylene glycol methyl ether 109-99-9, Tetrahydrofuran, uses 110-49-6, Ethylene glycol methyl ether acetate 110-63-4, Butylene glycol, uses 110-71-4, Ethylene glycol dimethyl ether 110-80-5, Ethylene glycol ethyl ether 111-46-6, Diethylene glycol, uses 111-76-2, Ethylene glycol butyl ether 111-77-3, Diethylene glycol methyl ether 111-96-6, Diethylene glycol dimethyl ether 112-27-6, Triethylene glycol 112-34-5, Diethylene glycol butyl ether 112-35-6 112-60-7, Tetraethylene glycol 123-42-2, Diacetone alcohol 123-86-4, Butyl acetate 141-78-6, Ethyl acetate, uses 143-22-6 629-38-9, Diethylene glycol methyl ether acetate 7382-32-3 9003-13-8, Polyoxypropylene butyl ether 9004-77-7, Polyoxyethylene butyl ether 13343-98-1 24800-44-0, Tripropylene glycol 25265-71-8, Dipropylene glycol 25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene glycol 25498-49-1, Tripropylene glycol methyl ether 34590-94-8, Dipropylene glycol methyl ether 35884-42-5, Dipropylene glycol butyl ether 55934-93-5, Tripropylene glycol butyl ether 106392-12-5, Ethylene oxide propylene oxide block copolymer 111109-77-4, Dipropylene glycol dimethyl ether
 RL: NUU (Other use, unclassified); USES (Uses)
 (water miscible solvent; contaminant-tolerant foaming additive contg. alc. ether sulfates)
 IT 9005-25-8, Starch, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (contaminant-tolerant foaming additive contg. alc. ether sulfates)
 RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 3 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2003:271590 HCAPLUS
 DN 138:288665
 TI Water-soluble films for packaging of alkaline substances
 IN Isozaki, Takanori; Fujiwara, Naoki; Higasa, Shintaro
 PA Kuraray Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM B65D065-46
 ICS C08F008-12; C08F216-06; C08J005-18; C08L029-04; C08F226-00; C08L001-00
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 5, 46
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

PI JP 2003104436 A2 20030409 JP 2001-302361 20010928
 PRPI JP 2001-302361 20010928

- AB The films for packaging of alk. substances such as pesticides and detergents, comprise **modified vinyl alc. polymers** having 1-10 mol% N-vinylamide monomer units and sapon. degree 82-99.5 mol%, and optionally contain carbohydrates. Thus, a film comprising sapon. vinyl acetate-N-vinylcaprolactam copolymer (N-vinylcaprolactam unit content 6.0 mol%, sapon. degree 98.4 mol%) 100, glycerin 15, etherified **starch** 20, and talc 5 parts showed Young's modulus 2.9 kg/mm², tensile strength 2.4 kg/cm², and good biodegradability and dissolved in H₂O at 10.degree. within 67 and 70 s before and after packaging of an soln. (pH 11) contg. 1 wt.% glycerin-ethanolamine mixt. at 40.degree. for 4 wk.
- ST water soluble film modified polyvinyl alc; sapon. vinyl acetate vinylcaprolactam copolymer film; alkali packaging vinyl alc polymer film; carbohydrate polyvinyl alc biodegradable packaging film; detergent pesticide packaging alkali resistance film
- IT Carbohydrates, uses
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (additive for improved water soly.; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
- IT Chemically resistant materials
 (alkali-resistant; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
- IT Packaging materials
 (biodegradable, films; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
- IT Packaging materials
 (films; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
- IT Biodegradable materials
 (packaging, films; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
- IT Detergents
 Pesticides
 Plastic films
 (water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
- IT Bases, miscellaneous
 RL: MSC (Miscellaneous)
 (water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
- IT 99-20-7, Trehalose **9005-25-8**, Corn starch, uses
9005-25-8D, Starch, ether or oxidized 66230-82-8, MS 3800
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (additive for improved water soly.; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)
- IT 25086-89-9DP, Vinyl acetate-N-vinyl-2-pyrrolidone copolymer, sapon.
 27399-70-8DP, Vinyl acetate-N-vinylcaprolactam copolymer, sapon.
 28928-24-7DP, N-Methyl-N-vinylacetamide-vinyl acetate copolymer, sapon.
 80512-26-1DP, N-Vinylacetamide-vinyl acetate copolymer, sapon.
 108941-57-7DP, Vinyl acetate-N-vinylformamide copolymer, sapon.
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT 141-43-5, Ethanolamine, miscellaneous
 RL: MSC (Miscellaneous)
 (water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

IT 9005-25-8, Corn starch, uses 9005-25-8D, Starch, ether or oxidized
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (additive for improved water soly.; water-sol. vinyl alc.-vinylamide copolymer films for packaging of alk. substances)

RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 4 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2003:113002 HCAPLUS
 DN 138:154400
 TI Deodorizing and antiaggregation paste compositions when packaged in pliable bags and containers
 IN Yoshida, Yasushi; Fujii, Akira
 PA Kao Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM D06M013-184
 ICS D06M013-224
 CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 40

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003041483	A2	20030213	JP 2001-227514	20010727
PRAI	JP 2001-227514		20010727		

AB The title comps. comprise: (A) a **polymer** contg. units from vinyl acetate and at least one of unsatd. carboxylic acids or their lower alc. esters, (B) nonionic surfactant, and (C) fragrance substances, and the bags and containers have all light transmittance at 200-800 nm .ltoreq.30%. Thus, emulsion **polymg. cationic-modified starch**, with vinyl acetate, acrylic acid and N,N-dimethylacrylamide gave an A, 65 parts of which was mixed with 3 parts propylene glycol, 0.2 parts KM 97 (silicone) and C to give a title compn. stored in a bag laminated from nylon, LDPE and aluminum foil, wherein C contains: undecyl aldehyde, amyl salicylate, coumarin, cyclamen aldehyde, .alpha.-ionone, lavender oil, rose oxide, rosemary oil, and alcs.

ST vinyl acetate acrylic acid starch copolymer paste compn; fragrance substance pliable bag deodorizing antiaggregation paste compn

IT Alcohols, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (aliph., in fragrance substances; in deodorizing and antiaggregation paste comps. when packaged in pliable bags and containers)

IT Pastes
 (deodorizing and antiaggregation paste comps. when packaged in pliable

- bags and containers)
- IT Laminated materials
(for pliable bags or containers for packaging deodorizing and antiaggregation paste compns.)
- IT Deodorants
Odor and Odorous substances
(in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)
- IT Paper
(in pliable bag formulations for packaging deodorizing and antiaggregation paste compns.)
- IT Polyamides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(in pliable bag formulations for packaging deodorizing and antiaggregation paste compns.)
- IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(lavender, in fragrance substances; in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)
- IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(lemon, in fragrance substances; in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)
- IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(lime, in fragrance substances; in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)
- IT Bags
Containers
(pliable; for packaging deodorizing and antiaggregation paste compns.)
- IT Essential oils
RL: MOA (Modifier or additive use); USES (Uses)
(rosemary, in fragrance substances; in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)
- IT 2680-03-7, N,N-Dimethylacrylamide
RL: MOA (Modifier or additive use); USES (Uses)
(crosslinking agent for base compn.; in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)
- IT 7429-90-5, Aluminum, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(foil; in pliable bag formulations for packaging deodorizing and antiaggregation paste compns.)
- IT 79-10-7DP, Acrylic acid, **polymer** with trimethylglycidylammonium chloride-**modified starch** and vinyl acetate
108-05-4DP, Vinyl acetate, **polymer** with trimethylglycidylammonium chloride-**modified starch** and acrylic acid **3033-77-0DP**, 1-(Trimethylammonio)-2,3-epoxypropane chloride, reaction product with starch, polymer with acrylic acid and vinyl acetate **9005-25-8DP**, Starch, reaction product with trimethylglycidylammonium chloride, polymer with acrylic acid and vinyl acetate
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)
- IT 60-12-8, Phenylethyl alcohol 78-70-6, Linalool 80-54-6, Lilial
88-41-5, o-tert-Butylcyclohexyl acetate 91-64-5, Coumarin 101-86-0, .alpha.-Hexylcinnamic aldehyde 103-95-7, Cyclamen aldehyde 104-67-6,

.gamma.-Undecalactone 106-22-9, Citronellol 106-24-1, Geraniol 106-25-2, Nerol 112-44-7, Undecyl aldehyde 112-45-8, Undecylene aldehyde 112-54-9, Dodecyl aldehyde 115-95-7, Linalyl acetate 118-58-1, Benzyl salicylate 120-51-4, Benzyl benzoate 120-57-0, Heliotropin 121-33-5, Vanillin 127-41-3, .alpha.-Ionone 140-11-4, Benzyl acetate 142-19-8, Allyl heptanoate 488-10-8, (Z)-Jasmone 2050-08-0, Amyl salicylate 5392-40-5, Citral 6413-10-1, Fructose 8000-41-7, Terpeneol 8007-35-0, Terpinyl acetate 16409-43-1, Rose oxide 32210-23-4, p-tert-Butylcyclohexyl acetate 43052-87-5, .alpha.-Damascone 53219-21-9, Dihydromyrcenol 55066-48-3, Phenoxanol 62053-09-2, Decenol 65405-77-8, cis-3-Hexenyl salicylate 68039-49-6, Tripral 80449-98-5, Liral 139504-68-0, Amber core 176201-49-3, Poarenet 177771-82-3, Ambroxan 177771-94-7, Magnol

RL: MOA (Modifier or additive use); USES (Uses)

(in fragrance substances; in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)

IT 9002-88-4, Polyethylene

RL: TEM (Technical or engineered material use); USES (Uses)

(in pliable bag formulations for packaging deodorizing and antiaggregation paste compns.)

IT 57-55-6, Propylene glycol, uses

RL: NUU (Other use, unclassified); USES (Uses)

(nonionic surfactant; in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)

IT 3033-77-ODP, 1-(Trimethylammonio)-2,3-epoxypropane chloride, reaction product with starch, polymer with acrylic acid and vinyl acetate

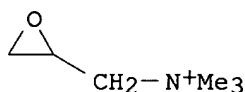
9005-25-8DP, Starch, reaction product with trimethylglycidylammonium chloride, polymer with acrylic acid and vinyl acetate

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(in deodorizing and antiaggregation paste compns. when packaged in pliable bags and containers)

RN 3033-77-0 HCAPLUS

CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 5 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:111093 HCAPLUS

DN 138:153961

TI Water soluble polymer dispersions and their production method

IN Takeda, Hisao; Sugiyama, Toshiaki

PA Hymo Corpraton, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L101-14

ICS C08F002-20; C08L001-08; C08L003-02; C08L003-04; C08L005-08

CC 35-4 (Chemistry of Synthetic High Polymers)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003041137	A2	20030213	JP 2001-226033	20010726
PRAI	JP 2001-226033		20010726		

AB Title dispersions comprise .gtoreq.1 water sol. polymer particles with particle diam. .ltoreq.100 .mu.m selected from cationic, nonionic, and amphoteric polymers and aq. salt soln.-sol. natural polymers as dispersing agents. Thus, 59.0 g aq. 50% acrylamide and 100.4 g aq. 80% acryloyloxyethyltrimethylammonium chloride were polymd. in the presence of 30.3 g aq. 20% chitosan with mol. wt. 500,000 and cation equiv. 4.44 meq/g to give an aq. polymer dispersion with polymer particle diam. .ltoreq.10 .mu.m, viscosity 400 mPa-s, and wt. av. mol. wt. 10,000,000.

ST water soluble polymer dispersions prepn; acryloyloxyethyltrimethylammonium chloride acrylamide copolymer prepn chitosan dispersant

IT Polyelectrolytes
(amphoteric; prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT Polyelectrolytes
(cationic, optionally dispersing agents; prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT Dispersing agents
(prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT Polymers, preparation
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(water-sol.; prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT 2382-43-6D, 2-Hydroxypropyltrimethylammonium chloride, starch derivs.
3033-77-0D, Glycidyltrimethylammonium chloride, natural type polymer derivs. 9004-34-6D, Cellulose, derivs. **9005-25-8D**, Starch, cationically **modified** 9012-76-4, Chitosan 9012-76-4D, Chitosan, glycidyltrimethylammonium chloride derivs. 9032-42-2, Methylhydroxy ethylcellulose
RL: MOA (Modifier or additive use); USES (Uses)
(dispersing agent; prepn. of water sol. **polymer** dispersions in presence of dispersing agents)

IT 35429-19-7P, Acrylamide-methacryloyloxyethyltrimethylammonium chloride copolymer 69418-26-4P, Acrylamide-acryloyloxyethyltrimethylammonium chloride copolymer 75150-29-7P, Acrylamide-acryloylaminopropyltrimethylammonium chloride copolymer 101060-97-3P 108388-79-0P 109578-73-6P, Acrylamide-acrylic acid-acryloyloxyethyltrimethylammonium chloride copolymer 140668-04-8P 160767-52-2P 496809-90-6P 496810-06-1P
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(prepn. of water sol. polymer dispersions in presence of dispersing agents)

IT 4584-46-7D, 2-Chloroethyldimethylammonium chloride, starch derivs.
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. of water sol. polymer dispersions in presence of dispersing agents)

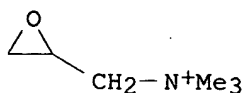
IT **3033-77-0D**, Glycidyltrimethylammonium chloride, natural type

polymer derivs. **9005-25-8D, Starch**, cationically
modified

RL: MOA (Modifier or additive use); USES (Uses)
 (dispersing agent; prepn. of water sol. **polymer** dispersions
 in presence of dispersing agents)

RN 3033-77-0 HCAPLUS

CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 6 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:961425 HCAPLUS

DN 138:26132

TI Procedure for the antisoiling treatment of textile and nontextile
 materials

IN Hamers, Christoph; Boeckh, Dieter; Schmidt, Kati

PA BASF AG, Germany

SO Ger. Offen., 18 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM D06B009-04

ICS C11D003-37

CC 46-5 (Surface Active Agents and **Detergents**)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10128900	A1	20021219	DE 2001-10128900	20010615
	WO 2002103106	A1	20021227	WO 2002-EP6511	20020613
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	DE 2001-10128900	A	20010615		
AB	Textile and nontextile surfaces are rendered resistant to soiling by treatment with dispersions of hydrophilic particles (size 10-2000 nm) based on polymers based on (A) 60-100% .gtoreq.1 carboxyl group-contg., ethylenically unsatd. monomer or their salts, (B) 0-40%				

- .gtoreq.1 water-insol. monoethylenically unsatd. monomer, (C) 0-25%
 .gtoreq.1 monomer having sulfonic acid and/or phosphonic acid groups or
 their salts, (D) 0-30% .gtoreq.1 water-sol. nonionic monomer and contg.
 anionic, nonionic and(or) betaine emulsifiers or protective colloids, with
 the surface of the particles being **modified** by .gtoreq.1
 cationic **polymer**, .gtoreq.1 multivalent metal ion, and(or)
 .gtoreq.1 cationic surfactant. A typical dispersion for spraying
 laundered fabrics was prepd. by dilg. a 14.7% solids aq. 17:55:77.5
 acrylic acid-Et acrylate-methacrylic acid copolymer dispersion with
 particle size 254 nm and contg. oxidized **starch** emulsifier with
 2000 ppm water of pH 4 and adding an equiv. amt. of a soln. contg. 200 ppm
 polyethylenimine (mol. wt. 1,000,000) in pH-4 water.
- ST antisoiling agent fabric cationic **modified** acrylic acid
 copolymer nanoparticle; oxidized **starch** emulsifier cationic
 acrylic nanoparticle antisoiling agent fabric; polyethylenimine
modified acrylic **polymer** nanoparticle antisoiling agent
 fabric; ethyl acrylate copolymer cationic **modified** nanoparticle
 antisoiling agent fabric; methacrylic acid copolymer cationic
modified nanoparticle antisoiling agent fabric
- IT Emulsifying agents
 (anionic; in dispersions for antisoiling treatment of textiles and
 nontextiles with cationically modified acrylic polymer nanoparticles)
- IT Laundering
 Nanoparticles
 (antisoiling treatment of textiles and nontextiles with dispersions of
 cationically modified acrylic polymer nanoparticles)
- IT Polyamines
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material
 use); USES (Uses)
 (cationic modifier; antisoiling treatment of textiles and nontextiles
 with dispersions of cationically modified acrylic polymer
 nanoparticles)
- IT Surfactants
 (cationic, cationic modifier; antisoiling treatment of textiles and
 nontextiles with dispersions of cationically modified acrylic polymer
 nanoparticles)
- IT Betaines
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material
 use); USES (Uses)
 (emulsifiers; in dispersions for antisoiling treatment of textiles and
 nontextiles with cationically modified acrylic polymer nanoparticles)
- IT Detergents
 (laundry; laundry detergents contg. antisoiling agents based on
 cationically modified acrylic polymer nanoparticles)
- IT Emulsifying agents
 (nonionic; in dispersions for antisoiling treatment of textiles and
 nontextiles with cationically modified acrylic polymer nanoparticles)
- IT Colloids
 (protective; in dispersions for antisoiling treatment of textiles and
 nontextiles with cationically modified acrylic polymer nanoparticles)
- IT 30351-73-6P, Acrylic acid-ethyl acrylate-methacrylic acid copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (antisoiling treatment of textiles and nontextiles with dispersions of
 cationically modified acrylic polymer nanoparticles)
- IT 7429-90-5, Aluminum, uses 7439-95-4, Magnesium, uses 7440-39-3,
 Barium, uses 7440-66-6, Zinc, uses 9002-98-6, Polyethylenimine
 10043-52-4, Calcium chloride, uses 26062-79-3,

Polydiallyldimethylammonium chloride

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(cationic modifier; antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT 9005-25-8D, Starch, oxidized

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(emulsifier; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT 9005-25-8D, Starch, oxidized

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(emulsifier; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 7 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:961424 HCAPLUS

DN 138:26131

TI Procedure for the antisoiling treatment of textile and nontextile materials

IN Hamers, Christoph; Boeckh, Dieter; Schmidt, Kati

PA BASF AG, Germany

SO Ger. Offen., 18 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM D06L001-12

CC 46-5 (Surface Active Agents and Detergents)

Section cross-reference(s): 40

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10128894	A1	20021219	DE 2001-10128894	20010615
	WO 2002103105	A2	20021227	WO 2002-EP6628	20020614
	WO 2002103105	A3	20030501		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	DE 2001-10128894	A	20010615		
AB	Textile and nontextile surfaces are rendered resistant to soiling by treatment with dispersions of hydrophilic particles (size 10-2000 nm) based on crosslinked polymers based on (A) 60-99.99% .gtoreq.1 carboxyl group-contg., ethylenically unsatd. monomers or their salts, (B)				

- 0-40% .gtoreq.1 water-insol. monoethylenically unsatd. monomer, (C)
 0.01-30% .gtoreq.1 monomer having >1 ethylenically unsatd. groups, (D)
 0-25% .gtoreq.1 monomers having sulfonic acid and/or phosphonic acid
 groups or their salts, (E) 0-30% .gtoreq.1 water-sol. nonionic monomer and
 contg. anionic, nonionic and(or) betaine emulsifiers or protective
 colloids, with the surface of the particles being **modified** by
 .gtoreq.1 cationic **polymer**, .gtoreq.1 multivalent metal ion,
 and(or) .gtoreq.1 cationic surfactant. A typical dispersion for spraying
 laundered fabrics was prepd. by dilg. a 14.7% solids aq. 17:2.1:3.1:132
 acrylic acid-allyl methacrylate-Et acrylate-methacrylic acid copolymer
 dispersion with particle size 134 nm and contg. oxidized **starch**
 emulsifier with 2000 ppm water of pH 4 and adding an equiv. amt. of a
 soln. contg. 200 ppm polyethylenimine (mol. wt. 1,000,000) in pH-4 water.
- ST antisoiling agent fabric cationic **modified** acrylic acid
 copolymer nanoparticle; oxidized **starch** emulsifier cationic
 acrylic nanoparticle antisoiling agent fabric; polyethylenimine
modified acrylic **polymer** nanoparticle antisoiling agent
 fabric; ethyl acrylate copolymer cationic **modified** nanoparticle
 antisoiling agent fabric; methacrylic acid copolymer cationic
modified nanoparticle antisoiling agent fabric; allyl methacrylate
 copolymer cationic **modified** nanoparticle antisoiling agent
 fabric
- IT Emulsifying agents
 (anionic; in dispersions for antisoiling treatment of textiles and
 nontextiles with cationically modified acrylic polymer nanoparticles)
- IT Laundering
 Nanoparticles
 (antisoiling treatment of textiles and nontextiles with dispersions of
 cationically modified acrylic polymer nanoparticles)
- IT Polyamines
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material
 use); USES (Uses)
 (cationic modifier; antisoiling treatment of textiles and nontextiles
 with dispersions of cationically modified acrylic polymer
 nanoparticles)
- IT Surfactants
 (cationic, cationic modifier; antisoiling treatment of textiles and
 nontextiles with dispersions of cationically modified acrylic polymer
 nanoparticles)
- IT Betaines
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material
 use); USES (Uses)
 (emulsifiers; in dispersions for antisoiling treatment of textiles and
 nontextiles with cationically modified acrylic polymer nanoparticles)
- IT Detergents
 (laundry; laundry detergents contg. antisoiling agents based on
 cationically modified acrylic polymer nanoparticles)
- IT Emulsifying agents
 (nonionic; in dispersions for antisoiling treatment of textiles and
 nontextiles with cationically modified acrylic polymer nanoparticles)
- IT Colloids
 (protective; in dispersions for antisoiling treatment of textiles and
 nontextiles with cationically modified acrylic polymer nanoparticles)
- IT 478296-43-4P, Acrylic acid-allyl methacrylate-ethyl acrylate-methacrylic
 acid copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (antisoiling treatment of textiles and nontextiles with dispersions of

cationically modified acrylic polymer nanoparticles)

IT 7429-90-5, Aluminum, uses 7439-95-4, Magnesium, uses 7440-39-3, Barium, uses 7440-66-6, Zinc, uses 9002-98-6, Polyethylenimine 10043-52-4, Calcium chloride, uses 26062-79-3, Polydiallyldimethylammonium chloride

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(cationic modifier; antisoiling treatment of textiles and nontextiles with dispersions of cationically modified acrylic polymer nanoparticles)

IT 9005-25-8D, Starch, oxidized

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(emulsifier; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

IT 9005-25-8D, Starch, oxidized

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(emulsifier; in dispersions for antisoiling treatment of textiles and nontextiles with cationically modified acrylic polymer nanoparticles)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 8 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:565012 HCAPLUS

DN 137:97510

TI Starch-based cationic-modified composition of flocculants or binders for ceramic manufacturing

PA Zuckerforschung Tulln Gesellschaft m.b.H., Austria

SO Austrian, 20 pp.

CODEN: AUXXAK

DT Patent

LA German

IC ICM C04B035-632

CC 57-2 (Ceramics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AT 408439	B	20011126	AT 2000-1435	20000821
	WO 2002016285	A1	20020228	WO 2001-AT260	20010801
	WO 2002016285	C2	20021128		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2001078299	A5	20020304	AU 2001-78299	20010801
	EP 1313682	A1	20030528	EP 2001-956206	20010801
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

US 2003145763 A1 20030807 US 2003-371135 20030221
 PRAI AT 2000-1435 A 20000821
 WO 2001-AT260 W 20010801

- AB The flocculants or binders for ceramic slips contains .gtoreq.95% of amylopectin of potato-**starch** (AP-PS) esp. AP-PS sulfamate that is cationic-**modified** with electropos. gelating quaternary amino-groups. The AP-PS is manufd. from potato using mol. biol., esp. genetic engineering, methods to inhibit the formation of amylose using GBSS genes. The AP-PS is used in the etherified or esterified form, and in the form of graft **polymer**. The AP-PS is linked by epichlorhydrin or 1,3-dichlor-2-propanol mixed with polyamines, or N,N'-dimethylol-N,N'-ethyleneurea mixed with phosphoroxychloride, sodium trimetaphosphate, polyepoxides, adipic acid, glyoxal. The binders based on the AP-PS are suitable for ceramic slips contg. aluminosilicate fibers, alumina, aluminosilicate, and chalk powders, cellulose or polyethylene fibers, and/or colloidal silica. Drying of ceramic formed from such slips is carried out at 300-500.degree. and sintering at 1500-2000.degree..
- ST ceramic slip flocculant binder amylopectin potatostarch graft polymer; aluminosilicate fiber alumina chalk silica starch polymer
- IT Gene, plant
 RL: NUU (Other use, unclassified); USES (Uses)
 (GBSS; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)
- IT Synthetic fibers
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (aluminum silicate, ceramic component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)
- IT Fibers
 RL: MOA (Modifier or additive use); USES (Uses)
 (cellulosic, ceramic slip component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)
- IT Chalk
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (ceramic component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)
- IT Polyamines
 RL: MOA (Modifier or additive use); USES (Uses)
 (component of linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)
- IT Polyolefin fibers
 RL: MOA (Modifier or additive use); USES (Uses)
 (ethylene, ceramic slip component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)
- IT Quaternary ammonium compounds, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (flocculant modifier; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)
- IT **Polymers, processes**
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (graft, amylopectin of potatostarch; **starch**-based cationic-**modified** compn. of flocculants or binders for ceramic manufg.)
- IT Viscosity

(of etherified amylopectin of potato-starch; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT Epoxides
 RL: MOA (Modifier or additive use); USES (Uses)
 (polyepoxides, component of linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 7773-06-0, Ammonium sulfamate
 RL: MOA (Modifier or additive use); USES (Uses)
 (cationic modifier; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 1344-28-1, Alumina, processes
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (ceramic component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 7631-86-9, Colloidal silica, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (colloidal, ceramic slip component; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 96-23-1, 1,3-Dichloro-2-propanol 106-89-8, uses 107-22-2, Glyoxal 123-38-6, Propionaldehyde, uses 124-04-9, Adipic acid, uses 136-84-5, N,N'-Dimethylol-N,N'-ethyleneurea 7785-84-4, Sodium trimetaphosphate 10025-87-3, Phosphoric trichloride
 RL: MOA (Modifier or additive use); USES (Uses)
 (component of linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 9005-25-8, Potato starch, uses 9037-22-3, Amylopectin
 RL: TEM (Technical or engineered material use); USES (Uses)
 (flocculant; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

IT 3033-77-0, 2,3-Epoxypropyltrimethyl ammonium chloride
 RL: MOA (Modifier or additive use); USES (Uses)
 (linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

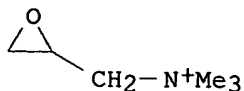
IT 9005-25-8, Potato starch, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (flocculant; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 3033-77-0, 2,3-Epoxypropyltrimethyl ammonium chloride
 RL: MOA (Modifier or additive use); USES (Uses)
 (linking agent; starch-based cationic-modified compn. of flocculants or binders for ceramic manufg.)

RN 3033-77-0 HCAPLUS
 CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

L41 ANSWER 9 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:315059 HCAPLUS
 DN 136:327419
 TI Detergent tablet
 IN ~~Emmerson, Harold~~; Campbell, Mairi; Brooker, Anju Deepali Massey; Thoen,
 Christiann Arthur Jacques Kamiel
 PA The Procter & Gamble Company, USA
 SO PCT Int. Appl., 84 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C11D017-00
 ICS C11D003-37
 CC 46-5 (Surface Active Agents and Detergents)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002033037	A1	20020425	WO 2000-US28797	20001018
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001010944	A5	20020429	AU 2001-10944	20001018
WO 2002033038	A2	20020425	WO 2001-US32593	20011018
WO 2002033038	A3	20030130		
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI WO 2000-US28797	A	20001018		
AB A detergent tablet, for use in a washing machine, has .gtoreq.1 phases .gtoreq.1 of which is as a compressed particulate solid comprising a crosslinked polymeric disintegrant and a disintegration retardant, optionally non-crosslinked disintegrants. An example detergent tablet				

contains a first phase contg. STPP 9.6, silicate 0.67, carbonate 2.74, HEDP 0.18, sodium perborate monohydrate 2.45, catalyst 0.002, triacetate 0.6, Sokalan HP 62G disintegrant 0.7, enzymes 0.17, nonionic 1.2, tetradecyl amine oxide disintegration retardant 0.24, polyethylene glycol 0.26, BTA 0.01, paraffin 0.1, and perfume 0.02, while a second phase may contain further surfactant actives. The detergent tablets display improved and/or controlled dissoln., strength and long-term storage characteristics.

- ST crosslinked polyvinylpyrrolidone amine oxide disintegration retardant detergent
- IT Detergents
(dishwashing; detergent tablet contg. crosslinked disintegrant and disintegration retardant)
- IT Surfactants
(disintegration retardant; detergent tablet contg. crosslinked disintegrant and disintegration retardant)
- IT Amine oxides
RL: TEM (Technical or engineered material use); USES (Uses)
(disintegration retardant; detergent tablet contg. crosslinked disintegrant and disintegration retardant)
- IT Detergents
(laundry; detergent tablet contg. crosslinked disintegrant and disintegration retardant)
- IT 9004-34-6, Cellulose, uses **9005-25-8, Starch**, uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(crosslinked; detergent tablet contg. crosslinked disintegrant and disintegration retardant)
- IT 415725-48-3, Sokalan HP 62G
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(detergent tablet contg. crosslinked disintegrant and disintegration retardant)
- IT 3332-27-2, Dimethyltetradecylamine oxide
RL: TEM (Technical or engineered material use); USES (Uses)
(detergent tablet contg. crosslinked disintegrant and disintegration retardant)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Basf Ag; WO 0047704 A 2000 HCAPLUS
- (2) Basf Ag; EP 1036839 A 2000 HCAPLUS
- (3) Procter & Gamble; WO 9811187 A 1998 HCAPLUS
- (4) Procter & Gamble; WO 0043488 A 2000 HCAPLUS
- (5) Rohm & Haas; EP 0972825 A 2000 HCAPLUS
- (6) Stockhausen Chem Fab GmbH; EP 1004656 A 2000 HCAPLUS

- IT **9005-25-8, Starch**, uses
RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
(crosslinked; detergent tablet contg. crosslinked disintegrant and disintegration retardant)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 10 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:904429 HCAPLUS
DN 136:39174

TI Use of cationically modified, particulate, hydrophobic polymers as
additives for rinsing, cleaning and impregnating agents for hard surfaces
IN Boeckh, Dieter; Noerenberg, Ralf; Hildebrandt, Soeren; Mohr, Bernhard;
Schoepke, Holger; Leyrer, Reinhold J.; Huff, Juergen
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C11D003-37
ICS C11D017-00; C11D017-06; C11D001-02; C11D001-38; C11D001-66;
C11D003-04; C11D003-20
CC 46-6 (Surface Active Agents and **Detergents**)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001094517	A1	20011213	WO 2001-EP6341	20010605
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 10027638	A1	20011213	DE 2000-10027638	20000606
	EP 1287103	A1	20030305	EP 2001-943474	20010605
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	DE 2000-10027638	A	20000606		
	WO 2001-EP6341	W	20010605		
OS	MARPAT 136:39174				
AB	The invention relates to the use of cationically modified, particulate, hydrophobic polymers whose surface is cationically modified by coverage with cationic polymers and whose particle size is between 10 nm and 100 um, as additives for rinsing, cleaning and impregnating agents for hard surfaces such as in dishwashing. An example was given based on acrylic acid-Et acrylate-methacrylic acid copolymer modified with epichlorohydrin-imidazole copolymer as the cationic modifier.				
ST	rinsing cleaning aid acrylic polymer particle cationic modification				
IT	Fluoropolymers, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (anionic; cationically modified, particulate hydrophobic fluoropolymers as additives for hard surface cleaners)				
IT	Emulsifying agents				
	Surfactants (anionic; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)				
IT	Polyelectrolytes (cationic; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)				
IT	Detergents (dishwashing; cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)				
IT	Quaternary ammonium compounds, uses				
	RL: MOA (Modifier or additive use); USES (Uses) (ester group-contg.; in cationically modified, particulate hydrophobic				

polymers as additives for hard surface cleaners)

IT Surfactants
(nonionic; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)

IT Colloids
(protective; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)

IT Detergents
(rinse aids; cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)

IT 62-54-4, Calcium acetate 7429-90-5D, Aluminum, salts 7439-95-4D, Magnesium, salts 7440-66-6D, Zinc, salts 9002-98-6, Ethylenimine homopolymer 9003-39-8, Polyvinylpyrrolidone 10043-52-4, Calcium chloride, uses 68797-57-9, Epichlorohydrin-imidazole copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(cationic modifier; in cationically modified, particulate hydrophobic polymers as additives for hard surface cleaners)

IT 25212-88-8, Ethyl acrylate-methacrylic acid copolymer 26300-51-6, Methyl methacrylate-Acrylic acid-butyl acrylate copolymer 30351-73-6, Methacrylic acid-Acrylic acid-ethyl acrylate copolymer 380220-23-5, Acrylamide-acrylic acid-ethyl acrylate-methacrylic acid copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(cationically modified, particulate hydrophobic acrylic polymers as additives for hard surface cleaners)

IT 380240-31-3, Nuva FTA 4
RL: TEM (Technical or engineered material use); USES (Uses)
(cationically modified, particulate hydrophobic fluoropolymers as additives for hard surface cleaners)

IT 9005-25-8, Starch, uses
RL: MOA (Modifier or additive use); USES (Uses)
(protective colloids; in cationically **modified**, particulate hydrophobic **polymers** as additives for hard surface cleaners)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(13)
(2) Kao Corp; EP 0372427 A 1990 HCAPLUS
(3) Kao Corp; JP 11209793 A 1999 HCAPLUS
(4) Reckitt & Colmann; WO 0017303 A 2000 HCAPLUS

IT 9005-25-8, Starch, uses
RL: MOA (Modifier or additive use); USES (Uses)
(protective colloids; in cationically **modified**, particulate hydrophobic **polymers** as additives for hard surface cleaners)

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 11 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:904427 HCAPLUS
DN 136:39143
TI Laundry compns. and use of particle-shaped, cationically modified hydrophobic polymers therefor
IN Boeckh, Dieter; Noerenberg, Ralf; Hildebrandt, Soeren; Mohr, Bernhard; Schoepke, Holger; Leyrer, Reinhold J.; Huff, Juergen
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent

LA German
 IC ICM C11D003-37
 CC 46-5 (Surface Active Agents and Detergents)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001094516	A1	20011213	WO 2001-EP6312	20010602
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 10027634	A1	20011213	DE 2000-10027634	20000606
	EP 1287104	A1	20030305	EP 2001-947335	20010602
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	DE 2000-10027634	A	20000606		
	WO 2001-EP6312	W	20010602		
OS	MARPAT 136:39143				
AB	The invention relates to the use of cationically modified, particle-shaped, hydrophobic polymers as additives in laundry formulations. The surface of the polymers is cationically modified by means of a coating of cationic polymers and the polymer particle size ranges from 10 nm to 100 .mu.m. An example for application to cotton was given which used acrylic acid-Et acrylate-methacrylic acid copolymer along with polyethylenimine as the cationic polymer.				
ST	laundering aid acrylic polymer particle cationic polyethylenimine modification				
IT	Emulsifying agents (anionic; in particle-shaped, cationically modified hydrophobic polymers for laundering aids)				
IT	Fluoropolymers, uses RL: TEM (Technical or engineered material use); USES (Uses) (anionic; particle-shaped, cationically modified hydrophobic fluoropolymers for laundering aids)				
IT	Polyelectrolytes Surfactants (cationic; in particle-shaped, cationically modified hydrophobic polymers for laundering aids)				
IT	Detergents (laundry; particle-shaped, cationically modified hydrophobic polymers for laundering aids for)				
IT	Colloids (protective; in particle-shaped, cationically modified hydrophobic acrylic polymers for laundering aids)				
IT	9002-98-6, Ethylenimine homopolymer 29297-55-0, Vinylimidazole-vinylpyrrolidone copolymer 68797-57-9, Epichlorohydrin-imidazole copolymer RL: MOA (Modifier or additive use); USES (Uses) (cationic modifier; in particle-shaped, cationically modified hydrophobic polymers for laundering aids)				
IT	25212-88-8, Ethyl acrylate-methacrylic acid copolymer 26300-51-6, Acrylic acid-butyl acrylate-methyl methacrylate copolymer 30351-73-6, Acrylic acid-ethyl acrylate-methacrylic acid copolymer 380220-23-5,				

Acrylamide-acrylic acid-ethyl acrylate-methacrylic acid copolymer

RL: TEM (Technical or engineered material use); USES (Uses)

(particle-shaped, cationically modified hydrophobic acrylic polymers for laundering aids)

IT 380240-31-3, Nuva FTA 4

RL: TEM (Technical or engineered material use); USES (Uses)

(particle-shaped, cationically modified hydrophobic fluoropolymers for laundering aids)

IT 9005-25-8, Starch, uses

RL: MOA (Modifier or additive use); USES (Uses)

(protective colloid; in particle-shaped, cationically modified hydrophobic acrylic polymers for laundering aids)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Gordon, N; WO 0056848 A 2000 HCAPLUS
- (2) Henkel Kgaa; DE 4323638 A 1995 HCAPLUS
- (3) Kao Corp; EP 0372427 A 1990 HCAPLUS
- (4) Matsuda, K; US 4746455 A 1988 HCAPLUS
- (5) Parran, J; US 3580853 A 1971

IT 9005-25-8, Starch, uses

RL: MOA (Modifier or additive use); USES (Uses)

(protective colloid; in particle-shaped, cationically modified hydrophobic acrylic polymers for laundering aids)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 12 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:904425 HCAPLUS

DN 136:39142

TI Laundry rinsing, care, detergent and cleaning products and use of cationically modified, particle-shaped, hydrophobic polymers in

IN Boeckh, Dieter; Noerenberg, Ralf; Detering, Juergen; Bertleff, Werner; Schoepke, Holger; Leyrer, Reinhold J.; Huff, Juergen

PA Basf Aktiengesellschaft, Germany

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM C11D003-37

ICS C11D017-00; C11D017-06; C11D001-02; C11D001-38; C11D001-66; C11D003-04

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE.
WO 2001094515	A1	20011213	WO 2001-EP6311	20010602
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10027636	A1	20011213	DE 2000-10027636	20000606

EP 1287102 A1 20030305 EP 2001-938247 20010602

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI DE 2000-10027636 A 20000606

WO 2001-EP6311 W 20010602

OS MARPAT 136:39142

AB The invention relates to the use of cationically modified, particle-shaped, hydrophobic polymers as additives in laundry or other cleaning formulations. The surface of the polymers is cationically modified by a coating of polyvalent metallic ions and/or cationic surfactants, and the particle size of the polymers ranges from 10 nm to 100 .mü.m. Examples for cotton laundering were given which used acrylic acid-Et acrylate-methacrylic acid copolymer and salts of Ca, Zn, or Al.

ST laundering aid acrylic polymer particle cationic modification

IT Emulsifying agents
(anionic; in cationically modified, particulate, hydrophobic polymer compns. for laundering)

IT Polyelectrolytes
(anionic; in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)

IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(anionic; in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)

IT Surfactants
(cationic; in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)

IT Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(ester group-contg., cationic surfactant; in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)

IT Detergent builders
(in cationically modified, particulate, hydrophobic polymer compns. for laundering)

IT Salts, uses
RL: MOA (Modifier or additive use); USES (Uses)
(in cationically modified, particulate, hydrophobic polymer compns. for laundering)

IT Detergents
(laundry; cationically modified, particulate, hydrophobic polymer compns. for)

IT Colloids
(protective; in cationically modified, particulate, hydrophobic polymer compns. for laundering)

IT 30351-73-6, Acrylic acid-ethyl acrylate-methacrylic acid copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(cationically modified, particulate, hydrophobic acrylic polymer compns. for laundering aids)

IT 380240-31-3, Nuva FTA 4
RL: TEM (Technical or engineered material use); USES (Uses)
(cationically modified, particulate, hydrophobic fluoropolymer compns. for laundering aids)

IT 62-54-4, Calcium acetate 7429-90-5D, Aluminum, salts 7439-95-4D, Magnesium, salts 7440-66-6D, Zinc, salts 10043-52-4, Calcium chloride, uses
RL: MOA (Modifier or additive use); USES (Uses)
(in cationically modified, particulate, hydrophobic polymer compns. for laundering aids)

IT 9005-25-8, Starch, uses

RL: NUU (Other use, unclassified); USES (Uses)
 (protective colloid; in cationically **modified**, particulate,
 hydrophobic acrylic **polymer** compns. for laundering aids)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Kao Corp; EP 0372427 A 1990 HCAPLUS
- (2) Matsuda, K; US 4746455 A 1988 HCAPLUS
- (3) Procter & Gamble; WO 9919440 A 1999 HCAPLUS
- (4) Procter & Gamble; WO 9927065 A 1999 HCAPLUS
- (5) Stockhausen Chem Fab GmbH; WO 8903669 A 1989 HCAPLUS

IT 9005-25-8, Starch, uses

RL: NUU (Other use, unclassified); USES (Uses)
 (protective colloid; in cationically **modified**, particulate,
 hydrophobic acrylic **polymer** compns. for laundering aids)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 13 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:798380 HCAPLUS

DN 135:346179

TI **Modified starch-based polymer**-containing
fabric care compositions and methods employing same

IN Moe, Jennifer Leupin; Spendel, Wolfgang Ulrich

PA Procter + Gamble Company, USA

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C11D003-22

CC 46-5 (Surface Active Agents and **Detergents**)

Section cross-reference(s): 44

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001081524	A1	20011101	WO 2001-US12759	20010419
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002045562	A1	20020418	US 2001-838512	20010419
EP 1274824	A1	20030115	EP 2001-928661	20010419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI US 2000-198710P	P	20000420		
WO 2001-US12759	W	20010419		
AB The patent relates to compns. and methods which utilize certain modified starch-based polymer and/or oligomer materials, particularly modified amylose and/or modified amylopectin materials, as fabric				

applicants

treatment agents that can impart **fabric** appearance and integrity benefits to **fabrics** and textiles laundered in washing solns. which contain such materials. The **modified starch**-based **polymer** and/or oligomer materials can be added to wash solns. by incorporating them into a laundry and/or **fabric** care compn., a **fabric** softener or by adding them sep. to the washing soln. The **modified starch**-based **polymer** and/or oligomer materials are described herein primarily as liq. or granular detergent additives but the present invention is not meant to be so limited. Thus, chlorocarboxylation product of **starch** /chlorohexane/monochloroacetic acid was prepd. and used as an additive with surfactants to make a laundry compn.

ST **starch** chloro compd substitution reaction product laundry detergent compn; carboxymethylation **starch** monochloroacetic acid detergent additive

IT Carboxymethylation
Surfactants

(in prepn. of **modified starch**-based **polymer**
-contg. **fabric** care compns.)

IT Detergents

(laundry; prepn. of **modified starch**-based
polymer-contg. **fabric** care compns.)

IT 79-11-8DP, Monochloroacetic acid, reaction product with **starch** 544-10-5DP, Hexyl chloride, reaction product with **starch** 3033-77-0DP, 2,3-Epoxypropyltrimethyl ammonium chloride, reaction product with **starch** 4860-03-1DP, Cetyl chloride, reaction product with **starch** 10126-68-8DP, Cetyl ketene dimer, reaction product with **starch** 28519-06-4DP, Chlorodecane, reaction product with **starch** 34214-79-4DP, Chlorohexadecane, reaction product with **starch**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(in prepn. of **modified starch**-based **polymer**
-contg. **fabric** care compns.)

IT 9005-82-7, Amylose 9037-22-3,
Amylopectin

RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of **modified starch**-based **polymer**
-contg. **fabric** care compns.)

IT 9005-25-8DP, **Starch**, reaction product with chloroalkanes and/or monochloroacetic acid, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepn. of **modified starch**-based **polymer**
-contg. **fabric** care compns.)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Akzo Nobel Nv; WO 9424169 A 1994 HCAPLUS
- (2) Basf Ag; EP 0526800 A 1993 HCAPLUS
- (3) Diehl; US 4011169 A 1977 HCAPLUS
- (4) Fidia Spa; EP 0615979 A 1994 HCAPLUS
- (5) Procter & Gamble; WO 9914245 A 1999 HCAPLUS
- (6) Procter & Gamble; WO 9914295 A 1999 HCAPLUS
- (7) Rudkin; US 4179382 A 1979 HCAPLUS

IT 79-11-8DP, Monochloroacetic acid, reaction product with

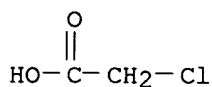
starch 544-10-5DP, Hexyl chloride, reaction product with starch 3033-77-0DP, 2,3-Epoxypropyltrimethyl ammonium chloride, reaction product with starch 4860-03-1DP, Cetyl chloride, reaction product with starch 10126-68-8DP, Cetyl ketene dimer, reaction product with starch 28519-06-4DP, Chlorodecane, reaction product with starch 34214-79-4DP, Chlorohexadecane, reaction product with starch

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(in prepn. of modified starch-based polymer -contg. fabric care compns.)

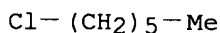
RN 79-11-8 HCAPLUS

CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



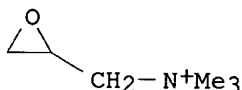
RN 544-10-5 HCAPLUS

CN Hexane, 1-chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)



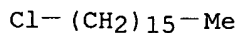
RN 3033-77-0 HCAPLUS

CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



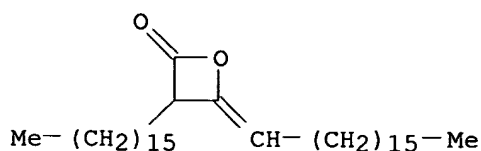
RN 4860-03-1 HCAPLUS

CN Hexadecane, 1-chloro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 10126-68-8 HCAPLUS

CN 2-Oxetanone, 4-heptadecylidene-3-hexadecyl- (8CI, 9CI) (CA INDEX NAME)



RN 28519-06-4 HCAPLUS
CN Decane, chloro- (6CI, 8CI, 9CI) (CA INDEX NAME)

Me- (CH₂)₈-Me

D1-C1

RN 34214-79-4 HCAPLUS
CN Hexadecane, chloro- (8CI, 9CI) (CA INDEX NAME)

Me- (CH₂)₁₄-Me

D1-C1

IT 9005-82-7, Amylose 9037-22-3,
Amylopectin
RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of modified starch-based polymer
-contg. fabric care comps.)

RN 9005-82-7 HCAPLUS
CN Amylose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9037-22-3 HCAPLUS
CN Amylopectin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 9005-25-8DP, Starch, reaction product with chloroalkanes
and/or monochloroacetic acid, uses
RL: IMF (Industrial manufacture); POF (Polymer in
formulation); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)
(prepn. of modified starch-based polymer
-contg. fabric care comps.)

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 14 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:571756 HCAPLUS
DN 136:185622

TI Starch adhesive and oxidation degree
 AU Wang, Feidi; Qiu, Qinghua
 CS Guangdong University of Technology, Canton, 510090, Peop. Rep. China
 SO Guangzhou Huagong (2001), 29(2), 22-24
 CODEN: GUHUEZ; ISSN: 1001-9677
 PB Guangzhou Huagong Bianjibu
 DT Journal
 LA Chinese
 CC 44-6 (Industrial Carbohydrates)
 AB The starch adhesive was prepd. from cassava starch by mixing with water, oxidizing with KMnO4 in the presence of moderator, finally mixing with NaOH, borax, CaCO3, etc. The effects of added amt. and concn. of oxidizing agent and oxidn. time on the quality of the adhesive were studied. The optimum amt. of oxidizing agent was 3%, its concn. was 4%, and the oxidn. time was 20 min.
 ST starch adhesive oxidn property
 IT Adhesion, physical
 Stability
 Viscosity
 (of starch adhesive after oxidn.)
 IT Adhesives
 Oxidation
 Oxidizing agents
 (starch adhesive oxidn.)
 IT Gelation
 (time; of starch adhesive after oxidn.)
 IT 9005-25-8DP, **Starch**, oxidized
 RL: **POF (Polymer in formulation)**; PRP (Properties); **SPN (Synthetic preparation)**; PREP (Preparation); USES (Uses)
 (cassava; starch adhesive)
 IT **9005-25-8**, Starch, reactions
 RL: **RCT (Reactant)**; **RACT (Reactant or reagent)**
 (cassava; starch adhesive oxidn)
 IT 471-34-1, Calcium carbonate, uses 1303-96-4, Borax 1310-73-2, Sodium hydroxide, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (starch adhesive contg.)
 IT 7722-64-7, Potassium permanganate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starch adhesive oxidn. by)
 IT **9005-25-8**, Starch, reactions
 RL: **RCT (Reactant)**; **RACT (Reactant or reagent)**
 (cassava; starch adhesive oxidn)
 RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 15 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:346273 HCAPLUS
 DN 134:368462
 TI Cationic cereal flours from low input growing as additives in paper manufacture
 AU Kratzsch, G.; Handreck, B.; Gottstein, D.; Schirner, R.; Fiehn, G.
 CS Hellriegel Institut, Germany
 SO PTS-Manuskript (2000), 2058, Einsatz von Staerke bei der Papiererzeugung, 6E, 6/1-6/15
 CODEN: PTSMFN; ISSN: 0942-749X

DT Report
 LA German
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
 Section cross-reference(s): 11
 AB Results on 3-yr investigations regarding prodn. of cereals under low input conditions (i.e., lower level of fertilization and plant protection), their **modification**, and use in paper industry are presented. Five to six varieties of rye, triticale, and barley were examd. with respect to cultivation, milling, chem. cationization (by reaction with 2,3-epoxypropyl-trimethylammonium chloride), and application in paper manuf. The crops were characterized by yield and quality (e.g., protein, **starch**, and pentosane). Low input cultivation induced good structure of grain (high **starch** and low protein content) and pos. effects on milling properties and on distribution of the ingredients of flour. Cationically **modified** cereals showed higher charge d., better viscoelastic properties in aq. suspensions and stability in colloidal dispersions with synthetic cobinders than flours from intensive cultivation. **Modified** rye flours were characterized by specific viscosity and **polymeric** charges useful for industrial application. A scaling-up of **modification** of renewable raw material from low input cultivation for conditions of industry confirmed the results from lab. Various test series of internally applied **modified** cereals in paper manufg. revealed a strength-enhancing effect of these products. The papers were assessed by their plybond strength, burst, and SCD.

ST cereal flour extensive cultivation compn rheol paper strength; rye flour extensive cultivation cationization paper additive; triticale flour extensive cultivation cationization paper additive; barley flour extensive cultivation cationization paper additive; cationic cereal flour extensive cultivation paper

IT Flours and Meals
 (barley; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)

IT Barley
 Rye
 Triticale
 (flour; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)

IT Proteins, general, analysis
 RL: ANT (Analyte); ANST (Analytical study)
 (plant; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)

IT Paper
 Strength
 (properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)

IT Flours and Meals
 (rye; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)

IT 3033-77-0, (2,3-Epoxypropyl)trimethylammonium chloride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (modifier; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)

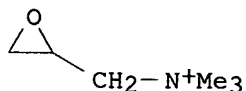
IT 9005-25-8, Starch, analysis
 RL: ANT (Analyte); ANST (Analytical study)
 (properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)

IT 3033-77-0, (2,3-Epoxypropyl)trimethylammonium chloride

RL: RCT (Reactant); RACT (Reactant or reagent)
 (modifier; properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)

RN 3033-77-0 HCAPLUS

CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

IT 9005-25-8, Starch, analysis

RL: ANT (Analyte); ANST (Analytical study)
 (properties of cereal flours from low-input cultivation and effects of cationic flours on paper strength)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 16 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:270532 HCAPLUS

DN 134:296914

TI Function component-encapsulated core-shell polymer composites

IN Meiwa, Zenpei; Hasebe, Yoshihiro; Tokunaga, Shinichi

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L101-16

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 44, 46, 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001106925	A2	20010417	JP 1999-290727	19991013
PRAI	JP 1999-290727		19991013		

AB The composite releasing functional component such as perfume, cold sense agents, fungicide, etc., comprises a functional component, a hydrophobic polymer particle, and a water-sol. polymer, wherein the hydrophobic polymer particle encapsulates the functional component and at least one part of hydrophobic polymer particles exists in the water sol. polymer. Thus, 2.5 parts DL-limonene (perfume)-encapsulated stearyl methacrylate-chitosan (SK 10)-methacrylic acid core-shell copolymer was mixed with T 330 (maleic acid-modified polyvinyl alc.) 100, glycerol 15, and W 400G (cellulose powder) 2.0, coated on a PET film, and dried to give a 70 .mu.m-thick film showing good fragrance strength after 30 days.

ST function component encapsulated hydrophobic polymer; chitosan methacrylate graft copolymer limonene PVA sheet

IT Silsesquioxanes

RL: POF (Polymer in formulation); TEM (Technical or engineered material

use); USES (Uses)
 (Me; function component-encapsulated core-shell polymer composites)

IT Fungicides
 Odor and Odorous substances
 Perfumes
 (function component-encapsulated core-shell polymer composites)

IT Carnauba wax
 Cottonseed oil
 Waxes
 RL: MOA (Modifier or additive use); USES (Uses)
 (function component-encapsulated core-shell polymer composites)

IT Polysiloxanes, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (function component-encapsulated core-shell polymer composites)

IT 252206-04-5P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (function component-encapsulated core-shell polymer composites)

IT 138-86-3, DL-Limonene 470-82-6, 1,8-Cineole 2216-51-5 179241-62-4, Sanisol P
 RL: MOA (Modifier or additive use); USES (Uses)
 (function component-encapsulated core-shell polymer composites)

IT 9003-20-7D, Poly(vinyl acetate), hydrolyzed 9003-39-8, K 60 9004-32-4, FT 3 9004-53-9, Pinedex 100 **9005-25-8D, Starch, modified**, uses 34229-80-6, Maleic acid-vinyl alcohol copolymer 52410-51-2, T 330 104922-10-3, Gohsenol GL 05 115252-32-9, Solfarex A 55
 RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
 (function component-encapsulated core-shell **polymer** composites)

IT **9005-25-8D, Starch, modified**, uses
 RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
 (function component-encapsulated core-shell **polymer** composites)

RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 17 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:64116 HCAPLUS
 DN 134:133315
 TI Encapsulated oil particles, their manufacture and granular detergent containing the same
 IN Dihora, Jiten Odhavji; Chapman, Benjamin Edgar
 PA Procter and Gamble Company, USA
 SO PCT Int. Appl., 26 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C11D003-50
 ICS C11D017-00; C11D003-12; A61K007-46; A23L001-22
 CC 46-5 (Surface Active Agents and **Detergents**)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI WO 2001005926 A1 20010125 WO 2000-US19471 20000714
 W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
 CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI,
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
 KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
 MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM,
 TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
 MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 BR 2000012673 A 20020409 BR 2000-12673 20000714
 EP 1196533 A1 20020417 EP 2000-948719 20000714
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 JP 2003505537 T2 20030212 JP 2001-511142 20000714
 US 6608017 B1 20030819 US 2001-980801 20011203
 PRAI US 1999-144635P P 19990720
 WO 2000-US19471 W 20000714
 AB The encapsulated oil particles, esp. useful in laundry detergent compns.,
 comprises a water-sol. **polymer** (such as **modified**
starch), an oil (such as perfume, flavor) and a hydrophobically
modified silica, wherein the hydrophobic additive is directly
 added to the oil prior to emulsification with the water-sol.
polymer.
 ST starch encapsulated oil particle granular detergent; perfume oil starch
 encapsulated silica particle
 IT Detergents
 (granular; manuf. of starch-encapsulated oil particles for granular
 detergents)
 IT Encapsulation
 Perfumes
 (manuf. of starch-encapsulated oil particles for granular detergents)
 IT 7631-86-9, Fumed silica, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (colloidal; manuf. of starch-encapsulated oil particles for granular
 detergents)
 IT 139351-18-1, Aerosil R 974 154303-25-0, Sipernat D 11
 RL: MOA (Modifier or additive use); USES (Uses)
 (manuf. of starch-encapsulated oil particles for granular detergents)
 IT **9005-25-8D, Starch**, modified, uses 26680-54-6D,
 Octenyl succinic anhydride, **starch** modified with 321864-30-6,
 Narlex PPE 1388
 RL: **POF (Polymer in formulation)**; TEM (Technical or engineered
 material use); USES (Uses)
 (manuf. of **starch**-encapsulated oil particles for granular
 detergents)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Behan, J; US 5500223 A 1996
- (2) Behan, J; US 5840668 A 1998 HCAPLUS
- (3) Garner-Gray, P; US 5336665 A 1994
- (4) Lion Corp; JP 61155307 A 1986 HCAPLUS
- (5) Nestle Sa; EP 0852912 A 1998 HCAPLUS
- (6) Procter & Gamble; EP 0523287 A 1993 HCAPLUS
- (7) Procter & Gamble; EP 0684301 A 1995 HCAPLUS
- (8) Procter & Gamble; EP 0965326 A 1999 HCAPLUS

IT 9005-25-8D, **Starch**, modified, uses
 RL: **POF (Polymer in formulation)**; TEM (Technical or engineered material use); USES (Uses)
 (manuf. of **starch**-encapsulated oil particles for granular detergents)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 18 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:675263 HCAPLUS

DN 134:164744

TI Preparation of the corn starch adhesive modified with polyvinyl formal resin

AU Gong, Da-chun; Luo, Hua-jun; Tu, Zhi-ying

CS Research Institute of Chemical Engineering, Sanxia University, Yichang, 443001, Peop. Rep. China

SO Huaxue Yu Nianhe (2000), (3), 122-123, 126

CODEN: HYZHEN; ISSN: 1001-0017

PB Huaxue Yu Nianhe Bianji Weiyuanhui

DT Journal

LA Chinese

CC 44-8 (Industrial Carbohydrates)

AB The corn starch was etherified with chloroacetic acid and then oxidated with H2O2 to give modified starch. The modified starch was mixed with polyvinyl formal prepd. Effects of etherification, oxidization, H2O2 amt., NaOH amt., and amt. of polyvinyl fomal on the adhesive properties of the compd. adhesive were discussed.

ST corn starch etherification oxidn polyvinyl formal adhesive

IT Adhesives

Adsorption

(effects on adhesion of etherified, oxidated starch adhesive mixts with polyvinyl formal)

IT Polyvinyl acetals

RL: **POF (Polymer in formulation)**; PRP (Properties); **SPN**

(**Synthetic preparation**); TEM (Technical or engineered material use);

PREP (Preparation); USES (Uses)

(formals; prepn., water adsorption, and viscosity of etherified, oxidated **starch** adhesive mixts with polyvinyl formal)

IT Etherification

Oxidation

(prepn., water adsorption, and viscosity of etherified, oxidated starch adhesive mixts with polyvinyl formal)

IT 1310-73-2, Sodium hydroxide, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(effects on adhesion of etherified, oxidated starch adhesive mixts with polyvinyl formal)

IT 7722-84-1, Hydrogen peroxide, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(oxidant; prepn., water adsorption, and viscosity of etherified, oxidated starch adhesive mixts with polyvinyl formal)

IT 9057-06-1P, Carboxymethyl **starch**

RL: **POF (Polymer in formulation)**; PRP (Properties); **SPN**

(**Synthetic preparation**); TEM (Technical or engineered material use);

PREP (Preparation); USES (Uses)

(prepn., water adsorption, and viscosity of etherified, oxidated **starch** adhesive mixts with polyvinyl formal)

IT 79-11-8, Chloroacetic acid, reactions 9005-25-8, Starch, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn., water adsorption, and viscosity of etherified, oxidated starch adhesive mixts with polyvinyl formal)
 IT 9005-25-8, Starch, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn., water adsorption, and viscosity of etherified, oxidated starch adhesive mixts with polyvinyl formal)
 RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 19 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2000:573561 HCAPLUS
 DN 133:179028
 TI Water-soluble polymer coating compositions for rendering solid surfaces glossy and soiling-resistant
 IN Holzner, Gunter Wolfgang; Karg, Ernst Jorn
 PA Tufty G.m.b.H., Germany
 SO Eur. Pat. Appl., 7 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 IC ICM C09G001-00
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1028150	A2	20000816	EP 1999-106921	19990408
	EP 1028150	A3	20011004		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	CH 1999-257	A	19990210		
AB	The title compns., useful for surface protection of articles made of glass, ceramics, china, glazed porcelain, clay, metal and plastic, comprise H2O-sol. polymers , e.g., gelatins, bone glue, (modified) starch and/or poly(vinyl alc.) (PVA). The coatings can be deposited from aq. cleaning agent solns., e.g., rinse solns. used in dishwashing machines or can be molded and suspended, e.g., inside a dishwashing machine where they slowly dissolve in the rinse solns. For example, a moldable compn. contained PVA 84.0, Irgasan DP-300 0.5, perfume 9.0, glycerol monooleate 5.0, aerosil 1.0 and citric acid 0.5%.				
ST	water sol polymer glossy soiling resistant coating; machine dishwashing rinse water sol polymer coating soiling resistance; polyvinyl alc dishwashing rinse water sol coating soiling resistance				
IT	Coating materials (antisoiling; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)				
IT	Glues Glues (bone glues, coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)				
IT	Gelatins, uses RL: TEM (Technical or engineered material use); USES (Uses)				

(coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)

IT Coating materials
(glossy, water-thinned; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)

IT Bone
Bone
(glues, coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)

IT China
(sanitary ware; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)

IT Ceramics
China
(water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)

IT Glass, miscellaneous
Metals, miscellaneous
Plastics, miscellaneous
RL: MSC (Miscellaneous)
(water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)

IT 9002-89-5, Mowiol 8-88 9004-53-9D, Dextrin, derivs. 9005-25-8, Starch, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)

IT 9005-25-8, Starch, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings; water-sol. polymer coating compns. for rendering solid surfaces glossy and soiling-resistant)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 20 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:54017 HCAPLUS

DN 132:109635

TI Starch-based wet-strength additive composition added before web formation in papermaking

IN Luukkonen, Kari

PA Raisio Chemicals Oy, Finland

SO PCT Int. Appl., 14 pp.
CODEN: PIXXD2

DT Patent

LA English

IC ICM D21H017-29
ICS D21H017-46; D21H021-20

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000003091	A1	20000120	WO 1999-FI602	19990707
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,				

TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

FI 9900228	A	20000111	FI 1999-228	19990205
CA 2336801	AA	20000120	CA 1999-2336801	19990707
AU 9950412	A1	20000201	AU 1999-50412	19990707
AU 746333	B2	20020418		
BR 9912263	A	20010417	BR 1999-12263	19990707
EP 1105571	A1	20010613	EP 1999-934746	19990707
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002520502	T2	20020709	JP 2000-559304	19990707
NO 2001000142	A	20010312	NO 2001-142	20010109
US 2001003760	A1	20010614	US 2001-756758	20010110
PRAI FI 1998-1586	A	19980710		
FI 1999-228	A	19990205		
WO 1999-FI602	W	19990707		

- AB The object of the present invention is an additive compn. for papermaking which is added to the pulp prior to web formation in order to increase the wet strength of the web. The compn. comprises **starch** which has been **modified**, preferably by peroxide oxidn., such that a 5% suspension has a Brookfield viscosity of 10-400 mPas at 60.degree., and is soln. cationized using a quaternary nitrogen compd. to a charge of <4 mEkv/g, and compn. contains .gtoreq.1 addnl. component, such as (1) a **starch-based polymer** dispersion of monomer-grafted **starch** comprising (based on dry-matter), (a) 5-40% **starch** having a cationic charge of 0.01-1 and intrinsic viscosity >1.0 dL/g, and (b) 60-95% of a monomer mixt. contg. .gtoreq.1 vinyl monomer and having a film formation temp. of 0-70.degree. of a **polymer** formed therefrom, and water, and/or (2) polyamide epichlorohydrin resin. Thus, a compn. comprising equal parts of 2,3-epoxypropyltrimethylammonium chloride-cationized thinned **starch**, **starch** grafted with acrylonitrile, Bu acrylate, and styrene, and polyamide epichlorohydrin resin was added at 1 kg/ton dithionite-bleached 50:50 pressure groundwood-thermomech. pulp prior to web formation, giving wet web strength 72.41 N/m at 27.8% dry matter content.
- ST starch oxidized cationic wet strength paper; vinyl grafted starch wet strength paper; epoxy polyamide wet strength additive paper
- IT Polyamides, uses
Polyamides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(epoxy; starch-based wet-strength additive compn. added before web formation in papermaking)
- IT Epoxy resins, uses
Epoxy resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyamide-; starch-based wet-strength additive compn. added before web formation in papermaking)
- IT Cellulose pulp
Newsprint
Paper
(starch-based wet-strength additive compn. added before web formation in papermaking)
- IT 3033-77-0D, 2,3-Epoxypropyltrimethylammonium chloride, reaction products with oxidized starch 9005-25-8D, Starch, oxidized, reaction products with epoxypropyltrimethylammonium chloride, uses

255385-28-5, Acrylonitrile-butyl acrylate-starch-styrene graft copolymer
 RL: TEM (Technical or engineered material use); USES (Uses)
 (starch-based wet-strength additive compn. added before web formation
 in papermaking)

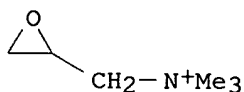
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Basf Aktiengesellschaft; EP 0301372 A1 1989 HCAPLUS
- (2) Bayer Ag; DE 19728789 A1 1999 HCAPLUS
- (3) Eastman Kodak Company; GB 1095123 A 1967
- (4) George Weston Foods Limited; WO 9746591 A1 1997 HCAPLUS
- (5) Raison Tehta Oy; WO 9310305 A1 1993 HCAPLUS
- (6) Weyerhaeuser Company; WO 9716595 A1 1997 HCAPLUS

IT 3033-77-0D, 2,3-Epoxypropyltrimethylammonium chloride, reaction
 products with oxidized starch 9005-25-8D, Starch, oxidized,
 reaction products with epoxypropyltrimethylammonium chloride, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (starch-based wet-strength additive compn. added before web formation
 in papermaking)

RN 3033-77-0 HCAPLUS

CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 21 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:282147 HCAPLUS

DN 130:297443

TI Emulsifying composition and emulsions based on water, clay and hydrophilic
 polymer

IN Namiki, Hideo; Yui, Hiroshi

PA Kabushiki Kaisha Frontier, Japan

SO PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM B01J013-00

ICS A61K007-035

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 45, 46, 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 9920386	A1	19990429	WO 1998-JP4771	19981021
	W: US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				

PT, SE
 JP 11188253 A2 19990713 JP 1998-9226 19980121
 PRAI JP 1997-290037 19971022
 JP 1998-9226 19980121
 AB Emulsifying compn. comprises water, a clay and a hydrophilic polymer, and the emulsions is obtained by high-speed agitation of the compn. and can be used for prepn. of cosmetics and detergents without using a surfactant. Thus a emulsion was prepd. by mixing of water 300 with squalane oil 0.9, bentonite 0.6, and alginic acid 3 g.
 ST emulsion emulsifying compn water clay hydrophilic polymer
 IT Castor oil
 Corn oil
 Olive oil
 Rape oil
 Soybean oil
 Sunflower oil
 RL: MOA (Modifier or additive use); USES (Uses)
 (compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
 IT Caseins, uses
 Collagens, uses
 Fibroin
 Polyoxyalkylenes, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
 IT Gelatins, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (optional salts; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
 IT Emulsions
 (prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer)
 IT Clays, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer)
 IT Polymers, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer)
 IT Cosmetics
 (prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
 IT Detergents
 (prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for detergents)
 IT Fats and Glyceridic oils, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (sesame, compn. contg.; prepn. of emulsifying compn. and emulsions based on water, clay and hydrophilic polymer for cosmetics)
 IT Fats and Glyceridic oils, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (teaseed, compn. contg.; prepn. of emulsifying compn. and emulsions. based on water, clay and hydrophilic polymer)

IT 111-01-3, Squalane 9004-61-9, Hyaluronic acid 9005-32-7, Alginic acid
 RL: MOA (Modifier or additive use); USES (Uses)
 (compn. contg.; prepn. of emulsifying compn. and emulsions based on
 water, clay and hydrophilic polymer for cosmetics)

IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6 9003-01-4, Poly(acrylic acid)
 9003-05-8, Poly(acrylamide) 9003-09-2, Poly(vinyl methyl ether)
 9003-39-8 9003-47-8, Polyvinylpyridine 9004-32-4 9004-62-0,
 Hydroxyethylcellulose 9005-25-8, Starch, uses
 9005-53-2, Lignin, uses 9012-76-4, Chitosan 24991-23-9, Glutamic acid
 homopolymer, sru 25067-64-5 25104-18-1, Polylysine 25322-68-3
 25513-46-6, Glutamic acid homopolymer 26022-14-0, Poly(2-hydroxyethyl
 acrylate) 27119-07-9, Poly(2-acrylamide-2-methylpropane-sulfonic acid)
 27754-99-0, Poly(vinylphosphonic acid) 28327-80-2, Isobutylene-maleic
 acid copolymer 30946-70-4 38000-06-5, Polylysine
 RL: POF (Polymer in formulation); TEM (Technical or engineered
 material use); USES (Uses)
 (compn. contg.; prepn. of emulsifying compn. and emulsions based on
 water, clay and hydrophilic polymer for cosmetics)

IT 7732-18-5, Water, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (prepn. of emulsifying compn. and emulsions based on water, clay and
 hydrophilic polymer)

IT 9005-38-3, Sodium alginate
 RL: MOA (Modifier or additive use); USES (Uses)
 (prepn. of emulsifying compn. and emulsions based on water, clay and
 hydrophilic polymer for cosmetics)

IT 28408-65-3, Poly(N-Vinylacetamide)
 RL: POF (Polymer in formulation); TEM (Technical or engineered material
 use); USES (Uses)
 (prepn. of emulsifying compn. and emulsions based on water, clay and
 hydrophilic polymer for cosmetics)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Mikimoto Seiyaku K K; JP 884921 A 1996
 (2) Shiseido Co Ltd; JP 1045532 A 1998
 (3) Tosoh Corp; JP 02169024 A 1990 HCAPLUS

IT 9005-25-8, Starch, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered
 material use); USES (Uses)
 (compn. contg.; prepn. of emulsifying compn. and emulsions based on
 water, clay and hydrophilic polymer for cosmetics)

RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 22 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1998:548682 HCAPLUS
 DN 129:150310
 TI A biogradable starch-based coating to waterproof hydrophilic materials
 AU Fringant, C.; Rinaudo, M.; Gontard, N.; Guilbert, S.; Derradji, H.
 CS Centre Recherches Macromolecules Vegetales, University Joseph Fourier,
 Grenoble, F-38041, Fr.
 SO Starch/Staerke (1998), 50(7), 292-296
 CODEN: STARD; ISSN: 0038-9056
 PB Wiley-VCH Verlag GmbH
 DT Journal
 LA English

- CC 44-6 (Industrial Carbohydrates)
Section cross-reference(s): 43
- AB The efficiency of starch acetylation to reduce water sensitivity of hydrophilic materials was investigated. Starch acetate was either included in foamed starch trays and/or used to coat these trays, wheat gluten based films or paper sheets. The water sensitivity of these foamed trays (quantity and kinetics of water uptake) is shown to decrease when starch acetate content of the foam increases. The coating of the hydrophilic trays with starch triacetate is detailed. The biodegradability of the coating was also unambiguously demonstrated. Whatever the nature of the foam, the coating allowed in all cases to slow down the water uptake but best results were obtained in the case of a coated foam prep. with a starch-starch acetate blend. The coating of wheat gluten films was tested with disappointing results because of chem. incompatibility between wheat gluten and starch acetate. In the case of paper sheet coating, the efficiency in water sensitivity redn. increased with the thickness of the coating film. However, the water sensitivity of this coated paper remained higher than paper coated with polyethylene (with a similar coating thickness).
- ST starch acetate biodegradable waterproofing coating paper
- IT Paper
(acetylation of starch for biodegradable waterproofing coatings for)
- IT Waterproofing agents
(acetylation of starch for biodegradable waterproofing coatings for hydrophilic materials)
- IT Polymers, preparation
RL: BPR (Biological process); BSU (Biological study, unclassified);
POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(biodegradable; acetylation of **starch** for biodegradable waterproofing coatings for hydrophilic materials)
- IT Polymer degradation
(biol.; acetylation of starch for biodegradable waterproofing coatings for hydrophilic materials)
- IT Polymer blends
RL: PRP (Properties)
(starch-starch acetate; acetylation of starch for biodegradable waterproofing coatings for hydrophilic materials)
- IT Coating materials
(water-resistant; acetylation of starch for biodegradable waterproofing coatings for hydrophilic materials)
- IT 9000-92-4, Amylase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(activity in biodegradn. of starch acetate)
- IT 9041-63-8P, **Starch** triacetate, preparation
RL: BPR (Biological process); BSU (Biological study, unclassified);
POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(blends; acetylation of **starch** for biodegradable waterproofing coatings for hydrophilic materials)
- IT 9005-25-8, Starch, properties
RL: **POF (Polymer in formulation); PRP (Properties); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)**
(blends; acetylation of starch for biodegradable waterproofing coatings for hydrophilic materials)

IT 9005-25-8, Starch, properties
 RL: POF (Polymer in formulation); PRP (Properties); RCT (Reactant)
 ; RACT (Reactant or reagent); USES (Uses)
 (blends; acetylation of starch for biodegradable waterproofing coatings
 for hydrophilic materials)
 RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 23 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1998:459837 HCAPLUS
 DN 129:177216
 TI Finishing agents for laundered garments for retention of **fabric**
 shape and handle and treatment of **fabrics** with the agents
 IN Yoshida, Yasushi; Inogoshi, Junichi; Dejima, Hiroshi; Kubota, Hiroichi;
 Aoyagi, Munee
 PA Kao Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM D06M015-11
 ICS D06M013-463; D06M015-21; D06M015-233; D06M015-263; D06M015-333;
 D06M015-643
 CC 46-5 (Surface Active Agents and **Detergents**)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10183472	A2	19980714	JP 1997-259826	19970925
	JP 3420692	B2	20030630		
PRAI	JP 1996-291761	A	19961101		

OS MARPAT 129:177216
 AB The finishing agents (A) contain water-sol. polymers having wt.-av. mol.
 wt. 1000-6,000,000 and softening agents, and cotton **fabrics**
 treated with liqs. contg. 0.5% (on fiber) A for 5 min at 20.degree. show B
 value (stiffness, measured by KES-FB1) 0.05-1.0 g.cm²/cm and greater than
 B value of the untreated cotton **fabrics** and exhibit 2HG5 value
 (hysteresis width at shear deformation, measured by KES-FB2-S) 0-10.0 g/cm
 and smaller than 2HG5 value of the untreated cotton **fabrics**. A
 T shirt was washed with a detergent in an automatic washing machine,
 rinsed, centrifuged, treated with a liq. contg. 0.1% (on fiber) finishing
 agent contg. 8.0% cationic starch and 5.0% Q 2-2036 (water-sol. silicone),
 and dried to give a shirt with B value 0.16 g.cm²/cm and 2HG5 value 5.8
 g/cm and exhibiting shape retention rating (5 best, 1 worst) 5 and handle
 (+2 very good, -2 very poor) from +2 to +1.
 ST **fabric** laundered finishing; clothing laundered finishing; shirt
 laundered finishing; cationic starch finish laundered garment; silicone
 softener laundered garment; handle retention laundered garment finishing;
 shape retention laundered garment finishing
 IT Polysiloxanes, uses
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or
 engineered material use); USES (Uses)
 (Q 2-2036, BY 16-052, softening agent; finishing agents contg.
 water-sol. polymers and softening agents for laundered garments for
 retention of **fabric** shape and handle)
 IT Textiles
 (cotton; finishing agents contg. water-sol. polymers and softening

agents for laundered garments for retention of **fabric** shape and handle)

IT Clothing

Fabric softeners

Laundering

Textiles

(finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT Quaternary ammonium compounds, uses

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT Clothing

(shirts; finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT Polymers, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(water-sol.; finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT 9002-89-5, PVA 105 9003-04-7, Poly(acrylic acid) sodium salt

9003-39-8, N-Vinyl-2-pyrrolidone homopolymer **9005-25-8D**, **Starch**, cationized, uses 9080-79-9, Polystyrenesulfonic acid sodium salt 81859-24-7, UCARE Polymer JR 125 131954-48-8

RL: **POF (Polymer in formulation)**; PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT 143711-48-2, SM8702C

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(softening agent; finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT 107-64-2, Dimethyldistearylammonium chloride 3905-74-6

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(softening agent; finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

IT **9005-25-8D**, **Starch**, cationized, uses

RL: **POF (Polymer in formulation)**; PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(finishing agents contg. water-sol. polymers and softening agents for laundered garments for retention of **fabric** shape and handle)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 24 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:681032 HCAPLUS

DN 127:308014

TI Study on property of modified starch/polyethylene (PE) blend

AU Wang, Yuzhong; Chen, Zefang; Zheng, Changyi

- CS Res. Cent. Degradable Flame Retardant Polymer Mater., Sichuan Union Univ., Chengdu, 610064, Peop. Rep. China
- SO Suliao Gongye (1996), 24(3), 98-100
CODEN: SUGOF9; ISSN: 1005-5770
- PB Suliao Gongye Bianjibu
- DT Journal
- LA Chinese
- CC 37-5 (Plastics Manufacture and Processing)
Section cross-reference(s): 44, 46
- AB The compatibility, thermal property and mech. properties of modified starch/PE blends and PE were studied by using 5 starch modifiers: modifier A (vinyl silane-contg. material), modifier B (amylase), modifier C (multi-Me silane), modifier D (OP emulsifier) and modifier E (phosphoric acid ester compd.). The compatibility of the modified starch and PE were improved to a certain degree, with that of modifier A improved most obviously. SEM anal. showed that the starch was well dispersed in PE, with a hazy interface, the initial decompn. temp. of the blend was higher than that of pure starch, and the processing temp. window of the blend was wider as detd. by TG and DSC. The mech. properties of modified starch/PE blends were all better than those of non-modified starch/PE blend, and the mech. properties of the blend modified by modifier A were the best.
- ST modified starch polyethylene blend compatibility property
- IT Fusion enthalpy
(compatibility, thermal and mech. property of modified starch-polyethylene blend)
- IT Contact angle
(of water with starch modified with various modifiers)
- IT **Polymer** morphology
(phase; compatibility, thermal and mech. property of **modified starch-polyethylene blend**)
- IT **Polymer** blends
RL: **POF (Polymer in formulation)**; PRP (Properties); USES (Uses)
(polyethylene-modified starch; compatibility, thermal and mech. property of **modified starch-polyethylene blend**)
- IT Surfactants
(starch modified with; compatibility, thermal and mech. property of modified starch-polyethylene blend)
- IT Silanes
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(starch modified with; compatibility, thermal and mech. property of modified starch-polyethylene blend)
- IT 7732-18-5, Water, properties
RL: PRP (Properties)
(contact angle of water with starch modified with various modifiers)
- IT 9002-88-4, 1F7B
RL: **POF (Polymer in formulation)**; PRP (Properties); USES (Uses)
(low-d., modified **starch** blend; compatibility, thermal and mech. property of modified **starch-polyethylene blend**)
- IT **9005-25-8, Starch**, properties
RL: **POF (Polymer in formulation)**; PRP (Properties); USES (Uses)
(modified, polyethylene blend; compatibility, thermal and mech. property of modified **starch-polyethylene blend**)
- IT 7664-38-2D, Phosphoric acid, esters, properties 9000-92-4, Amylase
9036-19-5, OP
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(starch modified with; compatibility, thermal and mech. property of modified starch-polyethylene blend)

IT 9005-25-8, Starch, properties
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (modified, polyethylene blend; compatibility, thermal and mech.
 property of modified starch-polyethylene blend)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 25 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:315184 HCAPLUS

DN 126:294811

TI Water-resistant polymer compositions containing esterified starch, their
 molded products, and manufacture thereof

IN Tokiwa, Yutaka; Ueda, Takashi

PA Kogyo Gijutsuin, Japan; Chikyu Kankyo Sangyo Gijutsu K

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L003-06

ICS B29C047-00; C08L067-02; C08L071-02; C08L101-00

CC 44-6 (Industrial Carbohydrates)

Section cross-reference(s): 37

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09067468	A2	19970311	JP 1995-245190	19950831
PRAI JP 1995-245190		19950831		

AB The compns. are manufd. by melt mixing esterified starch with esterified
 (poly)glycerin and optional thermoplastic resins. The molded products are
 manufd. by melt mixing the compns. by using extruders and extruding the
 compns. through the dies of the extruders. Acetylated corn starch
 (esterification degree 3.0, water content 13%) was melt mixed with 40%
 triacetyl glycerin, pelletized, and heat pressed to give a 0.2-mm-thick
 film showing breaking strength 522 N/cm². Thin slices (thickness 100
 .mu.m) (100 mg) of the pellets showed 2% solubilization in 20 mL water
 after 3 h at 30.degree..

ST water resistance esterified starch glycerin ester; acetyl glycerin
 acetylated starch breaking strength; poly glycerin ester esterified starch
 water resistance

IT Polyesters, properties

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (aliph.; water-resistant polymer compns. and molds with high strength
 contg. esterified starch and esterified (poly)glycerin)

IT Polymers, preparation

RL: IMF (Industrial manufacture); POF (Polymer in
 formulation); PRP (Properties); PREP (Preparation); USES
 (Uses)

(biodegradable; water-resistant polymer compns. and molds with high
 strength contg. esterified starch and esterified
 (poly)glycerin)

IT Water-resistant materials

(water-resistant polymer compns. and molds with high strength contg.
 esterified starch and esterified (poly)glycerin)

IT Molded plastics, preparation

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
 (water-resistant polymer compns. and molds with high strength contg.)

esterified starch and esterified (poly)glycerin)

IT 9005-25-8, Starch, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (esterification of; water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)

IT 9002-88-4, Polyethylene
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (low-d.; water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)

IT 106-31-0, Butyric anhydride 108-24-7, Acetic anhydride 123-62-6, Propionic anhydride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starch esterification by; water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)

IT 9045-28-7P, Starch acetate 39433-68-6P, Starch propionate 144414-96-0P, Starch acetate butyrate
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
 (water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)

IT 102-76-1, Triacetyl glycerin 25395-31-7, Glycerin diacetate 25618-55-7D, Polyglycerin, esters 26446-35-5, Glycerin monoacetate
 RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
 (water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)

IT 24980-41-4, Polycaprolactone 25248-42-4, Polycaprolactone, sru
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)

IT 9005-25-8, Starch, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (esterification of; water-resistant polymer compns. and molds with high strength contg. esterified starch and esterified (poly)glycerin)

RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 26 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1996:186084 HCAPLUS
 DN 124:291248
 TI Dispersing agents derived from anhydrides and their use for making filled polymer compositions
 IN Blanchard, Pierre; Trouve, Patrick
 PA Coatex S.A., Fr.
 SO Eur. Pat. Appl., 24 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 IC ICM C07D307-89
 ICS C08K005-15; C09D017-00
 CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 46
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

PI EP 691336 A1 19960110 EP 1995-420156 19950613
 R: BE, DE, ES, FR, GB, IT
 FR 2722204 A1 19960112 FR 1994-8782 19940708
 FR 2722204 B1 19960920
 CA 2153358 AA 19960109 CA 1995-2153358 19950706
 US 5932641 A 19990803 US 1997-792877 19970131
 PRAI FR 1994-8782 19940708
 US 1995-499330 19950707

AB The title dispersing agents useful for inorg. or/and org. fillers added to polymers are derived from pyromellitic or benzophenonetetracarboxylic anhydride mono-esterified with C.1 to req.40 alkyl groups via a polyoxyethylene or/and a polyoxypropylene bridge, or with C10-40 alkyl, aryl, arylalkyl, or branched polyaryl groups. Thus, mixing a propylene carbonate dissoln. of pyromellitic anhydride with tristyrylphenol and ethylene oxide prepd. a dispersing agent.

ST alkoxyate pyromellitic anhydride ester dispersant; filler dispersant pyromellitic ester thermoplastic; thermoset compn filler dispersant pyromellitate; benzophenonetetracarboxylic anhydride alkoxyate ester dispersant

IT Dispersing agents
 (alkoxylated pyromellitic anhydride ethers and their use for making filled polymer compns.)

IT Glass, oxide
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
 (beads or balloon fillers; dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Coloring materials
 Limestone, uses
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
 (dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Alkyd resins
 RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
 (dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Epoxy resins, uses
 RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
 (dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Phenolic resins, uses
 RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
 (dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Urethane polymers, uses
 RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
 (dispersing agents derived from anhydrides and their use for making filled polymer compns.)

IT Carbon fibers, uses
 Kaolin, uses
 Mica-group minerals, uses
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)

- (filler; dispersing agents derived from anhydrides and their use for making filled polymer compns.)
- IT Rubber, synthetic
 RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
 (EPDM, dispersing agents derived from anhydrides and their use for making filled polymer compns.)
- IT Synthetic fibers, polymeric
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
 (cellulosic, filler; dispersing agents derived from anhydrides and their use for making filled polymer compns.)
- IT Polyoxyalkylenes, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (esters, with tetracarboxylic anhydride; dispersing agents derived from and their use for making filled polymer compns.)
- IT Polyesters, uses
 RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
 (unsatd., dispersing agents derived from anhydrides and their use for making filled polymer compns.)
- IT 89-32-7DP, esters with polyalkylene glycols or polyalkylene glycol ethers
 174729-11-4P 174794-17-3P 174819-55-7P 174819-56-8P 175133-84-3P 176198-08-6P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (dispersing agents derived from and their use for making filled polymer compns.)
- IT 9002-86-2, PVC 9002-88-4 9003-07-0, Polypropylene 9003-53-6 9010-77-9, Acrylic acid-ethylene copolymer 9010-86-0, Ethyl acrylate-ethylene copolymer 24937-78-8, Ethylene-vinyl acetate copolymer 25103-74-6, Ethylene-methyl acrylate copolymer 25750-84-9, Butyl acrylate-ethylene copolymer 39475-61-1, Palatal P4 61722-01-8, Butylene-ethylene-propylene copolymer 110900-80-6D, Butadiene-ethylene-styrene block copolymer, modified 174794-78-6, Norsodyne I 2984V
 RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)
 (dispersing agents derived from anhydrides and their use for making filled polymer compns.)
- IT 123-77-3, Azodicarbonamide 471-34-1, Calcium carbonate, uses 546-93-0, Magnesium carbonate 1309-42-8, Magnesium hydroxide 1309-48-4, Magnesium oxide, uses 1314-13-2, Zinc oxide, uses 1332-37-2, Iron oxide, uses 7631-86-9, Silica, uses 7727-43-7, Barium sulfate 9005-25-8, Starch, uses 13463-67-7, Titania, uses 13983-17-0, Wollastonite 14807-96-6, Talc, uses 21645-51-2, Aluminum hydroxide, uses
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
 (filler; dispersing agents derived from anhydrides and their use for making filled polymer compns.)
- IT 9005-25-8, Starch, uses
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)
 (filler; dispersing agents derived from anhydrides and their use for making filled polymer compns.)
- RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 27 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1995:878980 HCAPLUS
 DN 123:259408
 TI High water-absorbency plastic foams and their preparation
 IN Xu, Lingyun
 PA Huayi Economic Scientific and Technical Industry Co., Shanghai, Peop. Rep. China
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.
 CODEN: CNXXEV
 DT Patent
 LA Chinese
 IC ICM C08J009-00
 ICS C08L029-04; C08L003-02
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 44, 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1095075	A	19941116	CN 1994-112140	19940428
PRAI	CN 1994-112140		19940428		
AB	The title open-cell foams are prepd. from poly(vinyl alc.) 100, corn or wheat starch 10-100, aldehydes (e.g., formaldehyde, glyoxal, adipic dialdehyde) 50-200, surfactants (e.g., polyethylene glycol, Span 60, Tween 80) 1-30, catalysts (e.g., sulfuric acid) 100-500 parts, and defoaming agents.				
ST	water absorbent polyvinyl alc starch; aldehyde polyvinyl alc open cell foam; surfactant polyvinyl alc open cell foam; catalyst sulfuric acid polyvinyl alc foam				
IT	Siloxanes and Silicones, uses RL: MOA (Modifier or additive use); USES (Uses) (defoaming agents; high water-absorbency plastic foams and their prepn.)				
IT	Antifoaming agents Catalysts and Catalysis Surfactants (high water-absorbency plastic foams and their prepn.)				
IT	Aldehydes, uses RL: MOA (Modifier or additive use); USES (Uses) (high water-absorbency plastic foams and their prepn.)				
IT	Plastics, cellular RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses) (high water-absorbency plastic foams and their prepn.)				
IT	7664-93-9, Sulfuric acid, uses RL: CAT (Catalyst use); USES (Uses) (high water-absorbency plastic foams and their prepn.)				
IT	50-00-0, Formaldehyde, uses 107-22-2, Glyoxal 1072-21-5, Adipic dialdehyde RL: MOA (Modifier or additive use); USES (Uses) (high water-absorbency plastic foams and their prepn.)				
IT	9002-89-5, Poly(vinyl alcohol) 9005-25-8, Starch, uses RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses) (high water-absorbency plastic foams and their prepn.)				
IT	1338-41-6, Span 60 9005-65-6, Tween 80 25322-68-3, Polyethylene glycol				

RL: MOA (Modifier or additive use); USES (Uses)
(surfactants; high water-absorbency plastic foams and their prepn.)

IT 9005-25-8, **Starch**, uses
RL: PEP (Physical, engineering or chemical process); **POF (Polymer in formulation)**; PRP (Properties); PROC (Process); USES (Uses)
(high water-absorbency plastic foams and their prepn.)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 28 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:748891 HCAPLUS

DN 123:343296

TI Starch-based sizing agent for dress

IN Zhang, Yinmao

PA Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

IC ICM D06M015-11

ICS D06M015-53

CC 40-9 (Textiles and Fibers)

Section cross-reference(s): 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1098754	A	19950215	CN 1993-109700	19930812
PRAI	CN 1993-109700		19930812		
AB	The title agent, giving good antistatic property to the treated dress, is prepd. by dissolving (water-sol.) starch, nonionic surfactants (e.g., nonylphenol polyoxyethylene ether, polyoxyethylene alkyl ether, Tween), essential oil, and fungicides (e.g., Na lactate, Ca lactate, Na benzoate) in water.				
ST	starch based dress sizing agent; nonylphenol polyoxyethylene ether starch sizing; Tween starch sizing agent antistatic; essential oil starch sizing agent; fungicide starch sizing agent; sodium lactate starch sizing agent; calcium lactate starch sizing agent; benzoate sodium starch sizing agent				
IT	Fungicides and Fungistats Sizes (starch-based sizing agent for dress)				
IT	Essential oils RL: MOA (Modifier or additive use); USES (Uses) (starch-based sizing agent for dress)				
IT	Surfactants (nonionic, starch-based sizing agent for dress)				
IT	72-17-3, Sodium lactate	532-32-1, Sodium benzoate	814-80-2, Calcium lactate		
	RL: MOA (Modifier or additive use); USES (Uses) (fungicides; starch-based sizing agent for dress)				
IT	9005-25-8, Starch , uses RL: POF (Polymer in formulation) ; TEM (Technical or engineered material use); USES (Uses) (starch-based sizing agent for dress)				
IT	9016-45-9, Polyoxyethylene nonylphenyl ether	25322-68-3D, alkyl ether			
	RL: MOA (Modifier or additive use); USES (Uses) (surfactants; starch-based sizing agent for dress)				

IT 9005-25-8, Starch, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (starch-based sizing agent for dress)

RN 9005-25-8 HCAPLUS
 CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 29 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1995:255340 HCAPLUS
 DN 122:12593
 TI Granular acidic cleaners especially for interiors of dishwashing machines
 IN Delwel, Francois; Gaudefroy, Charles Francois
 PA Unilever N. V., Neth.
 SO Eur. Pat. Appl., 7 pp.
 CODEN: EPXXDW

DT Patent
 LA English
 IC ICM C11D011-00
 ICS C11D017-06; C11D017-04; C11D003-20; C11D007-08; B01J002-28
 CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI EP 612843	A1	19940831	EP 1993-200494	19930222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
PRAI EP 1993-200494		19930222		

AB The title cleaners contain an acid such as sulfamic, maleic, or citric acid and are granulated with a binder comprising an inert water-insol. powder (e.g., starch or aluminosilicate) and an aq. soln. of a film-forming polymer (e.g., polymer of .gtoreq.1 unsatd. carboxylic acid) or an inert water-sol. powder (e.g., modified starch or maltodextrin) and water or an aq. soln. of a film-forming polymer. A cleaner for the interiors of dishwashing machines is packaged in a unit-dose 2-compartment container, e.g., contg. sulfamic and citric acids in sep. compartments.

ST carboxylic acid granulation cleaner dishwasher; maleic acid granulation cleaner dishwasher; sulfamic acid granulation cleaner dishwasher; citric acid granulation cleaner dishwasher; starch granulation acid cleaner; aluminosilicate granulation acid cleaner; polymer granulation acid cleaner; binder granulation acid cleaner

IT Carboxylic acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (in granulated cleaners for dishwashing machines)

IT Binding materials
 (in granulation of acid cleaners for dishwashing machines)

IT Dishwashing
 (machines; granulated acid compns. for cleaning interiors of)

IT Granulation
 (of acid cleaners for dishwashing machines)

IT Detergents
 (cleaning compns., granulated acid compns. for interiors of dishwashing machines)

IT Carboxylic acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (polymers, in granulation of acid cleaners for dishwashing machines)

IT 77-92-9, Citric acid, uses 110-16-7, Maleic acid, uses 5329-14-6,

Sulfamic acid

RL: TEM (Technical or engineered material use); USES (Uses)
(in granulated cleaners for dishwashing machines)IT 9005-25-8, Starch, uses 9005-25-8D, Starch, derivs.
9050-36-6, MaltodextrinRL: TEM (Technical or engineered material use); USES (Uses)
(in granulation of acid cleaners for dishwashing machines)

IT 9005-25-8, Starch, uses 9005-25-8D, Starch, derivs.

RL: TEM (Technical or engineered material use); USES (Uses)
(in granulation of acid cleaners for dishwashing machines)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 30 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1994:485654 HCAPLUS

DN 121:85654

TI Water-based lubricants for finishing automobile interior sheet
fabrics

IN Takahashi, Juichi

PA Kao Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM D06M013-02

ICS D06M015-11

CC 40-7 (Textiles and Fibers)

Section cross-reference(s): 45, 46

FAN.CNT 1

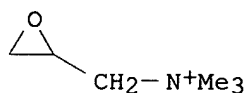
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05331766	A2	19931214	JP 1992-136502	19920528
PRAI	JP 1992-136502		19920528		

AB Title lubricants, showing reduced fogging of automobile parts (e.g., glass), contain .gtoreq.1 wax selected from hydrocarbon (oxides) and animal or plant-derived waxes and composites of cationic starch and anionic polymers. Thus, 93 parts powd. starch was cationized with glycidyltrimethylammonium chloride, dissolved in hot water, and mixed with 7 parts naphthalenesulfonic acid-HCHO copolymer Na salt, and the resulting compn. (solids 5%) was mixed with 25% paraffin wax, melted at 75-90.degree., emulsified, and cooled to give an aq. dispersion lubricant, which was applied onto a dyed PET **fabric** to give a product showing no fogging on a glass plate by a specified test.

ST lubricant aq dispersion automobile interior **fabric**; fogging prevention automobile interior **fabric** lubricant; wax cationic starch lubricant; paraffin wax lubricant automobile interior **fabric**

IT Paraffin waxes and Hydrocarbon waxes, uses
Waxes and Waxy substances
RL: USES (Uses)
(aq. lubricants contg. cationized starch composites and, for automobile interior sheet **fabrics**, for prevention of fogging)

- IT Phenolic resins, uses
 RL: USES (Uses)
 (composites with cationized starch, aq. lubricants contg. waxes and, for automobile interior sheet **fabrics**, for prevention of fogging)
- IT Polyester fibers, uses
 RL: USES (Uses)
 (**fabrics**, for automobile interiors, lubricants contg. waxes and cationized starch composites with anionic polymers as finishes for reduced fogging for)
- IT Lubricants
 (for automobile interior **fabrics**, contg. waxes and cationized starch composites with anionic polymers, for prevention of fogging)
- IT 25038-59-9, PET, uses
 RL: USES (Uses)
 (fiber, **fabrics**, for automobile interiors, lubricants contg. waxes and cationized starch composites with anionic polymers as finishes for reduced fogging for)
- IT **3033-77-0D**, Glycidyltrimethylammonium chloride, reaction products with **starch**, composites with anionic polymers 9005-25-8D, Starch, cationized, reaction products with anionic polymers 9084-06-4D, reaction products with cationized starch
 RL: USES (Uses)
 (lubricants contg. waxes and, for automobile interior **fabrics**, for reduced fogging)
- IT **3033-77-0D**, Glycidyltrimethylammonium chloride, reaction products with **starch**, composites with anionic polymers
 RL: USES (Uses)
 (lubricants contg. waxes and, for automobile interior **fabrics**, for reduced fogging)
- RN 3033-77-0 HCAPLUS
- CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



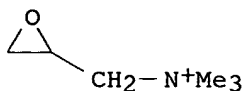
● Cl⁻

L41 ANSWER 31 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1994:32810 HCAPLUS
 DN 120:32810
 TI Cationic lubricants for fibers and their manufacture
 IN Takahashi, Juichi; Nakane, Shoji; Okamura, Masami
 PA Kao Corp, Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM D06M015-11
 ICS C08L091-00; D06L003-12; D06M013-02
 CC 40-7 (Textiles and Fibers)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05247845	A2	19930924	JP 1992-45619	19920303
PRAI	JP 1992-45619		19920303		
AB	Title lubricants comprise (A) .gtoreq.1 waxes selected from hydrocarbon waxes, their oxides, and animal or plant waxes and (B) aq. dispersions contg. cationized starch or its complexes with anionic polymers and are manufd. by dissolving cationized starch in H2O under heating, adding anionic polymers in the solns., stirring them under heating, adding waxes to them, and dispersing them at above m.p. of the waxes and .ltoreq.100.degree.. Thus, dissolving 5% (product basis) starch cationized with glycidyltrimethylammonium chloride in H2O, adding 25% (product basis) 135.degree.F-paraffin wax to the soln. at 70-90.degree., and emulsifying them gave a lubricant. A cotton fabric contg. a fluorescent brightener was padded with a soln. contg. 0.8% the lubricant, squeezed, and dried at 140.degree. to give a test piece showing good yellowing resistance.				
ST	cationized starch wax lubricant fiber; yellowing resistance cationic lubricant fiber				
IT	Lubricants (contg. cationized starch and waxes, for fibers, with good yellowing resistance)				
IT	Paraffin waxes and Hydrocarbon waxes, uses Waxes and Waxy substances RL: USES (Uses) (lubricants contg., cationized starch and, for fibers, with good yellowing resistance)				
IT	Synthetic fibers, polymeric RL: USES (Uses) (lubricants for, contg. cationized starch and waxes, with good yellowing resistance)				
IT	Creosote oil RL: USES (Uses) (sulfonated, polymers, with formaldehyde, sodium salts, lubricants contg., cationized starch and waxes and, for fibers, with good yellowing resistance)				
IT	50-00-0D, Formaldehyde, polymers with creosote oil sulfonic acids, sodium salts 9080-79-9, Poly(styrenesulfonic acid) sodium salt 9084-06-4, Formaldehyde-naphthalenesulfonic acid copolymer sodium salt 30915-61-8, Poly(maleic acid) sodium salt 37199-81-8, Diisobutylene-maleic anhydride copolymer sodium salt RL: USES (Uses) (lubricants contg., cationized starch and waxes and, for fibers, with good yellowing resistance)				
IT	100-35-6D, 2-Diethylaminoethyl chloride, reaction products with starch 2917-91-1D, 3-Diethylamino-1,2-epoxypropane, reaction products with starch 3033-77-0D , Glycidyltrimethylammonium chloride, reaction products with starch 9005-25-8D, Starch, cationized RL: USES (Uses) (lubricants contg., waxes and, for fibers, with good yellowing resistance)				
IT	3033-77-0D , Glycidyltrimethylammonium chloride, reaction products with starch RL: USES (Uses) (lubricants contg., waxes and, for fibers, with good yellowing resistance)				
RN	3033-77-0 HCAPLUS				

CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

L41 ANSWER 32 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1990:517016 HCAPLUS
 DN 113:117016
 TI Printing pastes containing carboxymethylated starch-cellulose mixtures
 IN Kako, Shigetoshi; Tokunaga, Mototsugu
 PA Daiichi Kogyo Seiyaku Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM D06P001-50

CC 40-6 (Textiles and Fibers)

Section cross-reference(s): 44

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02104776	A2	19900417	JP 1988-255282	19881011
PRAI	JP 1988-255282		19881011		

AB The title pastes used in printing with direct dyes, acid dyes, vat dyes, disperse dyes, naphthol dyes, and Rapidogen dyes contain alkali salts of carboxymethylated starch-cellulose mixts. with av. substitution degree (S) .gtoreq.0.5. Thus, 500 g sweet potato starch-cellulose mixt. was stirred in MeOH contg. 284.0 g NaOH at 30.degree. for 60 min and treated with a soln. of 312.0 g ClCH₂CO₂H in MeOH at 40-65.degree. to give a product with S 1.03 and NaCl content 0.90%. A polyester twill **fabric** was screen printed with a paste contg. Kayalon Polyester Blue 2R-SF and the product, dried, steamed, washed, soaped, washed, and dried to give printed **fabric** with good leveling.

ST printing paste carboxymethyl starch cellulose; direct dye printing paste; acid dye printing paste; vat dye printing paste; disperse dye printing paste; naphthol dye printing paste; polyester printing paste starch cellulose

IT Dyes

(naphthol, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)

IT Textile printing

(pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)

IT Polyamide fibers, uses and miscellaneous

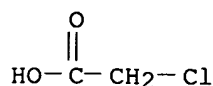
Polyester fibers, uses and miscellaneous

RL: USES (Uses)

(printing of, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)

IT Dyes

- (acid, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT Dyes
(direct, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT Dyes
(disperse, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT Dyes
(vat, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT 9004-34-6
RL: USES (Uses)
(dyes, acid, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT 9004-34-6
RL: USES (Uses)
(dyes, direct, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT 9004-34-6
RL: USES (Uses)
(dyes, disperse, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT 9004-34-6
RL: USES (Uses)
(dyes, naphthol, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT 9004-34-6
RL: USES (Uses)
(dyes, vat, for textile printing, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT 9004-32-4P, Cellulose carboxymethyl ether sodium salt 9063-38-1P, Starch carboxymethyl ether sodium salt
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, for printing pastes)
- IT 3351-05-1, Telon Fast Navy Blue R 88650-93-5, Kayalon Polyester Blue 2R-SF 129290-85-3, C.I. Direct Blue 236
RL: USES (Uses)
(printing by, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)
- IT 9004-34-6, Cellulose, reactions 9005-25-8, Starch, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chloroacetic acid)
- IT 79-11-8, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **starch**-cellulose mixt.)
- IT 79-11-8, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **starch**-cellulose mixt.)
- RN 79-11-8 HCAPLUS
- CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)



L41 ANSWER 33 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1990:461248 HCAPLUS

DN 113:61248

TI Printing pastes containing carboxymethylated starch-cellulose mixtures

IN Kako, Shigetoshi; Tokunaga, Mototsugu

PA Daiichi Kogyo Seiyaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM D06P001-48

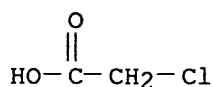
ICS D06M015-11

CC 40-6 (Textiles and Fibers)

Section cross-reference(s): 44

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02091282	A2	19900330	JP 1988-243711	19880927
PRAI	JP 1988-243711		19880927		
AB	The title pastes used in printing with reactive dyes contain alkali salts of carboxymethylated starch-cellulose mixts. with av. substitution degree (S) .gtoreq.1.3. Thus, 500 g sweet potato starch-cellulose mixt. was stirred in MeOH contg. 412.3 g NaOH at 30.degree. for 60 min and treated with a soln. of 463.4 g ClCH ₂ CO ₂ H at 40-65.degree. to give a product with S 1.53 and NaCl content 0.35%. A cotton cloth was screen printed with a paste contg. Cibacron Pront Turquoise G and the product, dried, steamed, washed, soaped, washed, and dried to give printed fabric with good leveling.				
ST	printing paste carboxymethyl starch cellulose; reactive dye printing paste; cotton printing paste starch cellulose				
IT	Textile printing (by reactive dyes, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)				
IT	Dyes, reactive (for textile printing, pastes contg. alkali salts of carboxymethyle d starch-cellulose mixts. for)				
IT	9004-32-4P, Cellulose carboxymethyl ether sodium salt 9063-38-1P, Starch carboxymethyl ether sodium salt RL: IMF (Industrial manufacture); PREP (Preparation) (prepn. of, for printing pastes)				
IT	12731-64-5, Cibacron Pront Turquoise G RL: USES (Uses) (printing by, pastes contg. alkali salts of carboxymethylated starch-cellulose mixts. for)				
IT	9004-34-6, Cellulose, reactions 9005-25-8, Starch, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with chloroacetic acid)				
IT	79-11-8, Monochloroacetic acid, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with starch -cellulose mixt.)				
IT	79-11-8, Monochloroacetic acid, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with starch -cellulose mixt.)				
RN	79-11-8 HCAPLUS				
CN	Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)				



L41 ANSWER 34 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1989:424923 HCAPLUS
 DN 111:24923
 TI Manufacture of cold water-dispersible sizing agents for fibers
 IN Yoneyama, Emi; Fujino, Hiroshi
 PA Sanwa Shoji K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese
 IC ICM D06M013-46
 ICS D06M015-11
 CC 40-9 (Textiles and Fibers)
 Section cross-reference(s): 44, 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01052877	A2	19890228	JP 1987-210701	19870825
	JP 07018088	B4	19950301		
PRAI	JP 1987-210701		19870825		

OS MARPAT 111:24923

AB Low-temp. title agents with excellent adhesion to fibers, useful as laundry starch, are manufd. by cationizing starch with epoxy-contg. quaternary ammonium compds., optionally mixing with alkali and water, and heating at .gtoreq.100.degree. and water content of 13-27%. Thus, 30 kg corn starch was stirred with 2.1 kg Catiomaster G (2,3-epoxypropyltrimethylammonium chloride) and 3 kg 0.4% aq. NaOH to give a mixt. with water content 20.5%, which was heated 4 h at 125.degree. and adjusted to water content 13% to give title sizing agent with size-forming temp. 38.degree., good dyeability, and adhesion 2.56% to cotton and 1.87% to polyester-cotton **fabric**, vs., 82, poor, 1.85, and 1.05, resp., for corn starch.

ST laundry starch cold water dispersing; size fiber cationized starch; sizing agent **fabric** cationized starch

IT Sizes

(cationized starch, cold water-dispersible, for **fabrics**)

IT Quaternary ammonium compounds, compounds

RL: USES (Uses)

(trialkyl(epoxyalkyl), reaction products, with starch, sizing agents, for **fabrics**)

IT 9005-25-8

RL: USES (Uses)

(sizes, cationized starch, cold water-dispersible, for **fabrics**)

IT 3033-77-0D, 2,3-Epoxypropyltrimethylammonium chloride, reaction products with **starch** 9005-25-8D, Starch, reaction products with epoxypropyltrimethylammonium chloride

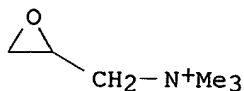
RL: USES (Uses)

(sizing agents, cold water-dispersible, for **fabrics**)

IT 3033-77-0D, 2,3-Epoxypropyltrimethylammonium chloride, reaction products with **starch**

RL: USES (Uses)

(sizing agents, cold water-dispersible, for fabrics)
 RN 3033-77-0 HCAPLUS
 CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L41 ANSWER 35 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1987:619111 HCAPLUS

DN 107:219111

TI Powdered starching agents for laundered fabrics

IN Ohira, Kozo; Iguchi, Kazuo

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM D06M015-11

ICS D06M013-46; D06M015-00; D06M015-643

ICA D06M011-04

CC 40-9 (Textiles and Fibers)

Section cross-reference(s): 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62117878	A2	19870529	JP 1985-248511	19851106
	JP 01018187	B4	19890404		
PRAI	JP 1985-248511		19851106		

AB Powd. mixts. comprising .alpha.-**modified starch** and/or processed **starch** 100, Na₂SO₄ 1-20, silicone 0.01-3, cationic surfactants or cationic **polymers** 0.1-15 parts and contg. .gtoreq.70% particles with diam. 40-250 .mu. have improved dispersibility in H₂O, and are useful for starching laundered fabrics with improved uniformity and good stiffness. Thus, **starch** 100, Na₂SO₄ 5, hydroxy(trimethylamino)propyl **starch** 2, H₂O 110 parts were mixed at 150.degree., dried, and pulverized to give .alpha.-**modified starch**-particles. These particles were then mixed with 2.5 parts siloxane to give a powder contg. 75% particles with diam. 40-250 .mu. and having good dispersibility in H₂O and good starching uniformity, in contrast to a similar compn. contg. 60% particles with diam. 40-250 .mu..

ST dispersibility powd **starch** starching agent; siloxane additive powd starching agent; cationic **polymer** additive powd **starch**; **starch modified** powd starching agent

IT Siloxanes and Silicones, uses and miscellaneous

RL: USES (Uses)

(modified starch powder starching agents contg., for improved dispersibility in water)

IT Particle size

(of powd. starching agents, control of, for improved dispersibility in

water)

IT Textiles
Wearing apparel
(starching agents for, **modified** powd. **starch** contg. cationic **polymers** or surfactants, sodium sulfate and siloxane as, with improved dispersibility in water)

IT Sizes
(starching agents, powd., **modified starch** contg. cationic **polymers** or surfactant, sodium sulfate and siloxanes as, with improved dispersibility in water, particle size control of)

IT Siloxanes and Silicones, uses and miscellaneous
RL: USES (Uses)
(di-Me, modified starch powder starching agents contg., for improved dispersibility in water)

IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(tetraalkyl, modified starch powder starching agents contg., for improved fabric stiffness)

IT 112-00-5, Lauryl trimethylammonium chloride 9004-34-6D, Cellulose, cationized 9063-45-0 18448-65-2, Bis(hydroxyethyl)methyloleylammonium chloride 28826-65-5 74070-70-5 81859-24-7, JR 400 82703-31-9, Didecyldimethylammonium methosulfate 111367-37-4 111367-39-6 111367-41-0
RL: USES (Uses)
(modified starch powder starching agents contg., for improved fabric stiffness)

IT 7757-82-6, Sodium sulfate, uses and miscellaneous
RL: USES (Uses)
(modified starch powder starching agents contg., for increased soly. in water)

IT **9005-25-8**
RL: USES (Uses)
(sizes, starching agents, powd., **modified starch** contg. cationic **polymers** or surfactant, sodium sulfate and siloxanes as, with improved dispersibility in water, particle size control of)

IT **9005-25-8D, Starch, alpha-modified**
9049-76-7, Hydroxypropyl starch
RL: USES (Uses)
(starching agents, powd., contg. sodium sulfate, siloxanes and cationic **polymers** or surfactants, with improved dispersibility in water)

IT **9005-25-8**
RL: USES (Uses)
(sizes, starching agents, powd., **modified starch** contg. cationic **polymers** or surfactant, sodium sulfate and siloxanes as, with improved dispersibility in water, particle size control of)

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **9005-25-8D, Starch, alpha-modified**
RL: USES (Uses)
(starching agents, powd., contg. sodium sulfate, siloxanes and cationic **polymers** or surfactants, with improved dispersibility in water)

RN 9005-25-8 HCAPLUS
CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 36 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1987:619110 HCAPLUS
 DN 107:219110
 TI Powdered starching agents for laundered fabrics
 IN Ohira, Kozo; Iguchi, Kazuo
 PA Kao Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM D06M015-11
 ICS D06M013-46; D06M015-00
 CC 40-9 (Textiles and Fibers)
 Section cross-reference(s): 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62117876	A2	19870529	JP 1985-248509	19851106
	JP 01018185	B4	19890404		
PRAI	JP 1985-248509		19851106		
AB	Powd. mixts. comprising 100 parts .alpha.- modified starch and/or processed starch and 0.1-15 parts cationic surfactants or cationic polymers and contg. .gtoreq.70% particles with diam. 40-250 .mu. have improved dispersibility in H2O, and are useful for starching laundered fabrics with improved uniformity and good stiffness. Thus, starch 100, hydroxy(trimethylamino)propyl starch 2, and H2O 100 parts were mixed at 150.degree., dried, and pulverized to give a powder contg. 75% particles with diam. 40-250 .mu. and having good dispersibility in H2O, in contrast to a similar compn. contg. 60% particles with diam. 40-250 .mu..				
ST	starch modified powd starching agent; dispersibility powd starch starching agent; cationic polymer additive powd starch ; surfactant cationic additive powd starch				
IT	Quaternary ammonium compounds, uses and miscellaneous RL: USES (Uses) (modified powd. starch starching agents contg., for improved fabric stiffness)				
IT	Particle size (of powd. starching agents, control of, for improved dispersibility in water)				
IT	Textiles Wearing apparel (starching agents for, modified powd. starch contg. cationic polymers or cationic surfactants as, with improved dispersibility in water)				
IT	Sizes (starching agents, powd., modified starch contg. cationic polymers or cationic surfactants as, with improved dispersibility in water, particle size control of)				
IT	Surfactants (cationic, modified powd. starch starching agents contg., for improved fabric stiffness)				
IT	112-00-5, Lauryl trimethylammonium chloride 9063-45-0 18448-65-2 28826-65-5 81859-24-7, JR 400 82703-31-9, Didecyldimethylammonium methosulfate 89004-51-3 111367-37-4 111367-39-6 111367-41-0 RL: USES (Usés)				

(modified powd. starch starching agents contg., for improved fabric stiffness)

IT 9005-25-8

RL: USES (Uses)

(sizes, starching agents, powd., **modified starch** contg. cationic **polymers** or cationic surfactants as, with improved dispersibility in water, particle size control of)

IT 9005-25-8D, **Starch**, alpha-**modified**

RL: USES (Uses)

(starching agents, powd., contg. cationic surfactants or cationic **polymers**, for fabrics, with improved dispersibility in water)

IT 9005-25-8

RL: USES (Uses)

(sizes, starching agents, powd., **modified starch** contg. cationic **polymers** or cationic surfactants as, with improved dispersibility in water, particle size control of)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 9005-25-8D, **Starch**, alpha-**modified**

RL: USES (Uses)

(starching agents, powd., contg. cationic surfactants or cationic **polymers**, for fabrics, with improved dispersibility in water)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 37 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1982:583916 HCAPLUS

DN 97:183916

TI Antistatic agents for synthetic fibers

PA Kao Soap Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC D06M015-04; D06M011-04; D06M011-08; D06M013-36; D06M015-20

CC 40-9 (Textiles)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 57082576	A2	19820524	JP 1980-159041	19801112
	JP 59053396	B4	19841225		
PRAI	JP 1980-159041		19801112		

AB Synthetic fibers finished with compns. contg. cationic cellulose (I), cationic starch, or a chitosan inorg. acid salt and RR1R2PO4, where R, R1, or R2 is H, NH4, or alkali metal, and (or) a deliquescent or hygroscopic amine salt have improved antistatic properties at low relative humidity. Thus, a polyester jersey was immersed in an aq. compn. contg. 0.02% I (Polymer JR 30M [55466-13-2]) and 0.15% guanidine hydrochloride (II) [50-01-1] to 90% pickup, dried, and heat-treated 1 min at 180.degree.. The electrostatic charge of the treated **fabric** at 20% relative humidity was 100 V, compared with 11,000 V for a **fabric** finished with a similar compn. without II.

ST cellulose cationic antistatic agent; guanidine hydrochloride antistatic agent; polyester fiber antistatic finishing; antistatic finishing

- synthetic fiber
- IT Acrylic fibers, uses and miscellaneous
RL: USES (Uses)
(antistatic agents for, cationic cellulose and calcium chloride and (or) potassium dihydrogen phosphate as)
- IT Polyamide fibers, uses and miscellaneous
RL: USES (Uses)
(antistatic agents for, cationic starch and guanidine hydrochloride or sodium dihydrogen phosphate as)
- IT Polyester fibers, uses and miscellaneous
RL: USES (Uses)
(antistatic agents for, cationic starch or cationic cellulose and amine salts and (or) phosphoric acid salts as)
- IT Antistatic agents
(cationic cellulose, cationic starch or chitosan hydrochloride and amine salts and (or) phosphoric acid salts, for synthetic fibers)
- IT 593-51-1 1302-42-7 7447-41-8, uses and miscellaneous 7646-93-7
RL: USES (Uses)
(antistatic agents contg., for synthetic fibers)
- IT 81859-24-7
RL: USES (Uses)
(antistatic agents, contg. calcium chloride and (or) potassium dihydrogen phosphate, for acrylic fibers)
- IT 7778-77-0 10043-52-4, uses and miscellaneous
RL: USES (Uses)
(antistatic agents, contg. cationic cellulose for acrylic fibers)
- IT 50-01-1
RL: USES (Uses)
(antistatic agents, contg. cationic cellulose or cationic starch, for synthetic fibers)
- IT 7722-76-1
RL: USES (Uses)
(antistatic agents, contg. cationic cellulose, for polyester fibers)
- IT 7790-69-4 13453-80-0
RL: USES (Uses)
(antistatic agents, contg. chitosan hydrochloride, for polyester fibers)
- IT 81859-24-7
RL: USES (Uses)
(antistatic agents, contg. guanidine hydrochloride and (or) ammonium dihydrogen phosphate, for polyester fibers)
- IT 3033-77-0D, reaction products with **starch**
RL: USES (Uses)
(antistatic agents, for nylon fibers)
- IT 7558-80-7
RL: USES (Uses)
(antistatic agents, with cationic starch, for nylon fibers)
- IT 9005-25-8D, reaction products with glycidyltrimethyl ammonium chloride
RL: USES (Uses)
(antistatic agents, with guanidine hydrochloride or sodium dihydrogen phosphate, for nylon fibers)
- IT 70694-72-3
RL: USES (Uses)
(antistatic agents, with lithium nitrate or lithium dihydrogen phosphate, for polyester fibers)
- IT 9004-34-6D, cationic
RL: USES (Uses)
(antistatic agents, with phosphoric acid salts or amine salts, for

synthetic fibers)

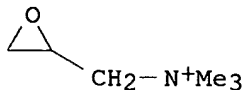
IT 3033-77-0D, reaction products with starch

RL: USES (Uses)

(antistatic agents, for nylon fibers)

RN 3033-77-0 HCAPLUS

CN Oxiranemethanaminium, N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

L41 ANSWER 38 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1980:112635 HCAPLUS

DN 92:112635

TI Metal-containing soap

IN Merkl, George G.

PA USA

SO U.S., 13 pp.

CODEN: USXXAM

DT Patent

LA English

IC C11D009-38; C11D013-00

NCL 252117000

CC 46-2 (Surface Active Agents and Detergents)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4182685	A	19800108	US 1977-758346	19770110
PRAI	US 1974-534084		19741223		

AB A water-sol., inorg., amide group-contg. monomeric or **polymeric** complex contg. Na and another metal is prepd. by the reaction of Si, Mo, Al, Zr, Ti, W, Mg, or Zn with aq. NH₃ and NaOH. The complex is treated with tallow fatty acids to prep. industrial and detergent soaps. In some cases, a **starch modified** with the metal-contg. complex is added to the soaps to give improved foaming and water retention or H₂O₂ is added to provide bleaching properties. The reaction of the metal with aq. NH₃ and NaOH proceeds through a first endothermic phase to give a monomeric complex and then through an exothermic phase to form a **polymeric** complex. Thus, a mixt. of 616 g Si and 1925 g aq. NH₃ (28.degree. Be) was treated slowly with 440 g NaOH to cause an endothermic reaction, 320 g unreacted Si was removed, 500 mL H₂O was added, and 12 g of the aq. soln. of the monomer complex contg. Si and Na was mixed with 13.7 g tallow fatty acids to prep. a powd. soap.

ST metal amide complex soap; bleach peroxide soap complex; starch metal complex soap; ammonia metal complex soap; transition metal amide complex soap

IT Transition metals, compounds

RL: USES (Uses)

(complexes with ammonia and sodium, salts with fatty acids, manuf. of)

IT Bleaching agents

(hydrogen peroxide, ammonia-metal complex soaps contg.)

IT Soaps

RL: IMF (Industrial manufacture); PREP (Preparation)
(metal, manuf. of)IT 9005-25-8D, reaction products with amide group-contg. metal
complex soaps

RL: USES (Uses)

(foaming and water retention agents, for metal complex soaps)

IT 7429-90-5D, complexes with ammonia and sodium, salts of fatty acids
 7439-95-4D, complexes with ammonia and sodium, salts of fatty acids
 7439-98-7D, complexes with ammonia and sodium, salts of fatty acids
 7440-21-3D, complexes with ammonia and sodium, salts of fatty acids
 7440-23-5D, complexes with ammonia and metals, salts of fatty acids
 7440-32-6D, complexes with ammonia and sodium, salts of fatty acids
 7440-33-7D, complexes with ammonia and sodium, salts of fatty acids
 7440-66-6D, complexes with ammonia and sodium, salts of fatty acids
 7440-67-7D, complexes with ammonia and sodium, salts of fatty acids
 7664-41-7D, reaction products with metals and sodium hydroxide, salts of
 fatty acids

RL: USES (Uses)

(industrial and detergent soaps)

IT 9005-25-8D, reaction products with amide group-contg. metal
complex soaps

RL: USES (Uses)

(foaming and water retention agents, for metal complex soaps)

RN 9005-25-8 HCAPLUS

CN Starch (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L41 ANSWER 39 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1977:441095 HCAPLUS

DN 87:41095

TI Glue compositions

IN Matsunaga, Kinjiro; Deguchi, Katsuhiko; Nagata, Yukiko; Nakagawa, Yunosuke

PA Kao Soap Co., Ltd., Japan

SO Jpn. Kokai Tokyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC D06M015-04

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 52018992	A2	19770212	JP 1975-93958	19750801
PRAI	JP 1975-93958		19750801		

AB Glues for clothes having good resistance to soil were prep'd. from
 hydroxypropylated starch [9005-25-8], maleic anhydride-styrene
 copolymer Et ester (I) [39279-98-6], and similar polymers. Thus, a
 polyester-cotton blend **fabric** treated with a 5% aq. soln. of
 80:20 hydroxypropylated starch-I (degree of esterification 0.5) had
 detergency 82%, compared with 23% for a similar **fabric**
 without treatment.

ST starch adhesive textile; styrene copolymer adhesive textile; maleic
 anhydride adhesive textile

IT Sprays

(adhesives contg. maleic anhydride-styrene copolymer esters and starch,

for textiles)
 IT Textiles
 (adhesives for, maleic anhydride-styrene copolymer esters contg. hydroxypropylated starch as, laundering-resistant)
 IT Esters, uses and miscellaneous
 RL: USES (Uses)
 (adhesives, contg. starch, for textiles)
 IT Adhesives
 (maleic anhydride-styrene copolymer esters, contg. starch, for textiles)
 IT Laundering
 (of textiles, adhesives resistant to, starch and maleic anhydride-styrene copolymer esters as)
 IT 60529-54-6
 RL: USES (Uses)
 (adhesives, contg. carboxymethylated starch, for textiles)
 IT 9038-42-0 62712-10-1 68890-83-5
 RL: USES (Uses)
 (adhesives, contg. hydroxyethoxylated starch, for textiles)
 IT 39279-98-6
 RL: USES (Uses)
 (adhesives, contg. hydroxypropylated starch for textiles)
 IT 9002-89-5 9005-25-8D, hydroxypropylated
 RL: USES (Uses)
 (adhesives, contg. maleic anhydride-styrene copolymer, for textiles)
 IT 25549-84-2
 RL: USES (Uses)
 (adhesives, contg. maleic anhydride-styrene copolymers for textiles)
 IT 52503-38-5
 RL: USES (Uses)
 (adhesives, contg. poly(sodium acrylate), for textiles)
 IT 60529-54-6
 RL: USES (Uses)
 (adhesives, contg. poly(vinyl alc.), for textiles)

L41 ANSWER 40 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1975:499605 HCAPLUS
 DN 83:99605
 TI Paste material
 IN Miyamoto, Akira
 PA Japan Food Processing Co., Ltd., Japan
 SO Jpn. Tokkyo Koho, 2 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 IC C09J; C08L; C08F; D21H; D04H
 CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
 Section cross-reference(s): 39

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 50010349	B4	19750421	JP 1969-90	19681228
PRAI	JP 1969-90		19681228		

AB Pastes and sizes for corrugated boards, paper, and nonwoven **fabrics** were prep'd. from polyacrylamide (I) [9003-05-8] or acrylamide copolymers, mol. wt. 300,000-600,000, contg. monochloroacetic acid [79-11-8], and optionally additives such as **starch**, TiO₂, kaolin, and synthetic resins. The I size improved the

dry-strength, printability, filler retention, and recycling properties of paper.

ST polyacrylamide chloroacetic acid size; nonwoven **fabric** size
polyacrylamide; corrugated board size polyacrylamide
IT Paperboard
(corrugated, sizes for, polyacrylamide-contg.)
IT Textiles
(nonwoven, sizes for, contg. polyacrylamide)
IT Sizes
(polyacrylamide, contg. monochloroacetic acid, for paper and textiles)
IT 9003-05-8
RL: USES (Uses)
(sized, contg. monochloroacetic acid, for corrugated board and nonwoven textiles)
IT 79-11-8, uses and miscellaneous
RL: USES (Uses)
(sizes contg. polyacrylamide and, for corrugated board and nonwoven textiles)

L41 ANSWER 41 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN'

AN 1965:67325 HCAPLUS

DN 62:67325

OREF 62:12008d-f

TI Modified starch

PA W. A. Scholten's Chemische Fabrieken N.V.

SO 3 pp.

DT Patent

LA Unavailable

IC C13L

CC 50 (Industrial Carbohydrates)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 110069		19641215	NL	19541116
AB	<p>Starch grains were swelled without destroying their granular structure by suspending in H2O in the presence of macromol. compds. The mixt. contains (calcd. as % of starch) 50% H2O and .gtoreq. 5% macromol. compds.; it is heated to 100-80.degree. and dried. The starch granules are swollen and lose their polarization cross. Suitable raw materials are corn, wheat, cassava, potato, and sago starch and starch derivs. such as thin-cooking starch, monoesterified and monoetherified insol. starch. The macromol. compds. used are sol. starch esters and ethers, amylopectin, glucose sirup, sol. cellulose esters and ethers, vegetable gums, and Na alginate. Thus, a mixt. of wheat starch 12,000, H2O 6000, and starch hydroxyalkyl ether 3000 parts is thinly spread on a rotating (2-3 rpm.) hot (130-40.degree.) drum. The heated suspension dries to form a 0.2-0.5 mm.-thick film, which is ground and sieved on a 1.5 mm. screen. This product (I), mixed with 4 parts H2O, gives a stable, viscous suspension contg. swollen, still individual starch granules. To a washing machine contg. 23 kg. freshly laundered lab. and butcher's coats, was added 80 l. H2O and 480 g. I. The dispersion was perfect after 2 min. rotation. After 5 min. mixing, the coats were centrifuged and pressed with steam at 6 atm. The finish was beautiful and not too stiff. The coats did not adhere to the press and the fabric dried readily.</p>				
IT	Esters (of starch, starch swelling by)				
IT	Cellulose esters Cellulose ethers				

Gums

Macromolecular compounds

(starch swelling by)

IT Ethers

(starch, starch swelling by)

IT Ammonium, (2,3-epoxypropyl)trimethyl

(starch modified by, gelation by compression and shearing)

IT Amylopectins

Glucose

(starch swelling by)

IT 9005-25-8, Starch

(and derivs., swelling by macromol. compds.)

IT 9005-32-7, Alginic acid

(starch swelling by)